

*Architecture, Expertise and the German Construction of the Ottoman Railway Network,
1868-1919*

A dissertation presented

by

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Architecture, Expertise and the German Construction of the Ottoman Railway Network, 1868-1919

ABSTRACT

The dissertation examines the production of knowledge and architecture through the German-sponsored construction of the Ottoman railway network, comprising four discrete projects: the railways of European Turkey, the Anatolian railways, the Baghdad railway and the Hejaz railway and its Palestinian tributaries. The German construction of the Ottoman railway network is an historic event that proffers the opportunity to critically reconsider the epistemological tenets of expertise in broader political, economic and cultural structures distinct from the normative creative processes that dominate the historiography of empires. The dissertation capitalizes on the ambiguous colonial nature of the German role in the architecture, engineering, and urbanism of the late Ottoman empire and situates it as a variegated and occasionally dialogic model of European cultural expansionism by way of a process identified here as ambiguous transmutation.

Previous scholarship on the railways has focused near exclusively on its self-evident geopolitical and economic import. This is the first comprehensive and critical consideration of the railways' role in placemaking and the production of cultural artifacts not limited to train stations, settlements, maps, bridges, monuments and an archaeological canon. These aspects are presented in a wide survey of textual archival sources, visual records and the extant constructions themselves. In its five chapters, the dissertation gives hue and insight into the motives, methods and artistic goals of the German, Ottoman, and

extra-national agents involved in the railways' gestation and five collateral forms of knowledge in which it was situated: political, geographic, topographic, archaeological and architectural and urban.

Wider findings emerge from this study. First, a burgeoning interdependency of modernity and secular rationalism with geopolitical strategy is manifest. Second, a new paradigm of the power / knowledge genre develops and privileges the transnational "expert" in the production of design knowledge in an early globalizing world order. Third, the railways' construction reveals new insight into the geopragmatic origins of multiculturalist logic. Lastly, the German construction of the Ottoman railway network materialized a site for paradigmatic mutations in architectural form. The dissertation explains these mutations and interprets their meaning. The dissertation serves an instructive function: explaining the dynamics of ambiguity as a way of negotiating innovation in knowledge amidst the excitement and duress of modernity.

VOLUME 1

PETER HEWITT CHRISTENSEN

ARCHITECTURE, EXPERTISE AND THE GERMAN CONSTRUCTION OF
THE OTTOMAN RAILWAY NETWORK, 1868-1919

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TABLE OF CONTENTS

VOLUME 1

ABSTRACT.....	iii
ACKNOWLEDGMENTS	x
NOTES ON DATES, TRANSCRIPTION AND FORMAT.....	xvii
ABBREVIATIONS.....	xx
LIST OF ILLUSTRATIONS.....	xxiii
INTRODUCTION	1
CHAPTER 1: POLITICS	23
1.1 On History.....	24
1.2 Foreigners, Techno-Industrial Exchanges and Early Tanzimat Reforms	26
1.3 British Dominance under Abdülmecid I, 1851–1861	32
1.4 Diversification and Expansion under Abdülaziz	38
1.5 German Infiltration and the Early Hamidian Years, 1876–1897	49
1.6 German Expansion and Ottoman Autonomy in the Later Hamidian Years, 1897–1908.....	67
1.7 Railway and Revolution: The Young Turk Period, 1908–1914	89
1.8 The Rush to Connect: The Baghdad Railway and the Great War	106
CHAPTER 2: GEOGRAPHY	116
2.1 Friedrich Ratzel and the Mutability of German Geography	117
2.2 Geography and the Shades of the German Colonization of the Ottoman Empire.....	129
2.3 Geography, Railway, and the Descriptive Tract.....	134
2.4 Dispatches from the Ottoman “Outback”: <i>Servet-i Fünun</i> ’s Geographic Representation of the Ottoman Railways	143
2.5 Wilhelm von Pressel and the Geographic Image of Bosnia in 1873	157
2.6 “In Wort und Bild”: The Legacy of the German Construction of the Ottoman Railways of Bosnia in the <i>Kronprinzenwerk</i>	162
2.7 Coded Geography: “Vocabulaire Telegraphique”	169
2.8 Locomotive Themes and Modern Vistas in the Abdülhamid II Albums.....	172
2.9 Theodor Rocholl’s Commemorative Anatolian Railway Album of 1908	174
2.10 The Philipp Holzmann Album of 1914.....	182
2.11 The “Héré-Déré” Album of Maschinenfabrik Augsburg-Nürnberg A.G.	185

2.13 The Philipp Holzmann Photo Collection	188
2.14 Conclusion: Tracts, Tracks, and German Geography	189
CHAPTER 3: TOPOGRAPHY	191
3.1 From Terra Incognita to Terra Firma	192
3.2 Topographies in Context	194
3.3 The Wilhelm von Pressel Folios and Study	200
3.4 The Černik Expedition of North Syria, the Tigris, and Euphrates	220
3.5 Gottlieb Schumacher and the German Benefits of the British Exploration of Palestine	224
3.6 The Stemrich Expedition of 1899–1900	234
3.7 The Karl Auler Expeditions of the Hejaz in 1904 and 1907	248
3.8 Land, Water, and British Competition, 1905–1910	255
3.9 Conclusion	260
CHAPTER 4: ARCHAEOLOGY	261
4.1 Sketch, Spade, Gauge: German Archaeology and Railway Construction in Context	262
4.2 Defining the Lay of the Land: The Evolving Antiquity Laws	265
4.3 Gordium	275
4.4 The Berggren Archaeological Portfolio	282
4.5 Felix von Luschan, Ethnoarchaeology, and Railway Construction at Sam'al	293
4.6 Tell Halaf	297
4.7 Gottlieb Schumacher and Mshatta	304
4.8 Gertrude Bell, Ernst Herzfeld, and the German-British Rivalry in Irak	313
4.9 Conclusion	321
CHAPTER 5: ARCHITECTURE AND URBANISM	323
5.1 Architecture, Urbanism and Ambiguous Transmutation	324
5.1.1 What is Ambiguous Transmutation?	324
5.1.2 Ambiguous Transmutation in Context	330
5.2 Ethnicity, Religion, Race, and Railway Building	335
5.2.1 Ethnicity, Religion, and Race as Organizational System	335
5.2.2 The Ottoman Railways in Europe: Parsing Balkanization	337
5.2.3 The Anatolian Railways: Multinationals and the Ottoman Core	341
5.2.4 The Hejaz Railway: Gauging the Vicissitudes of Expertise and Religion	344
5.2.5 The Baghdad Railway: Internationalism, Deliberate and Accidental	351
5.3 Labor Law: Frameworks for Life, Work, and Construction	358
5.3.1 Procedural Aspects of a Legible Aesthetic Network	358
5.3.2 Building Codes: Specifications and Authorial Openings	360
5.3.3 Biopolitics and Territorial Practices on the Work Site	371
5.4 Dam, Bridge, and Tunnel: Engineering an Empire	374
5.4.1 Ashlar, or The Political-Aesthetic Ambition of Infrastructure	374
5.4.2 The Varda Viaduct	377
5.4.3 The Euphrates Railway Bridge	379
5.4.4 The Konya Plain Dams and Irrigation Network	381
5.4.5 “Ten Arches” Bridge at Amman, Hejaz Culverts, and the Vardar River Bridge	383

5.4.6 A Taurus Range Tunnel Near Belededik	384
5.5 The Station: General Notes	385
5.6 The Station: The Railways of Ottoman Europe	390
5.6.1 From Europe to Asia: Codifying a Continental Threshold	390
5.6.2 Dobrljin to Banja Luka, İstanbul to Belovo	391
5.6.3 Salonica to Mitrovica, Salonica to Monastir	393
5.6.4 Sirkeci	396
5.7 The Station: The Anatolian Railways	402
5.7.1 To the Heart of the Empire and the Heart of the Matter	402
5.7.3 İzmit to Ankara and Konya via Eskişehir	405
5.7.4 Konya	410
5.8 The Station: The Hejaz Railway and its Palestinian Tributaries	416
5.8.1 Prefacing Pilgrimage	416
5.8.2 Typologies, Defined Spiritually	417
5.8.3 Damascus to Medina	419
5.8.4 Medina	422
5.8.5 Jaffa to Jerusalem, Daara to Haifa	424
5.9 The Station: The Baghdad Railway	426
5.9.1 The Faces of Consolidation / Penetration	426
5.9.2 The New Haydarpaşa Station	427
5.9.3 Konya to Kıralan	438
5.9.4 Durak to Fevzipaşa and İskenderun	441
5.9.5 Fevzipaşa to Nusaybin	448
5.9.6 Aleppo	452
5.9.7 Irak Vilayets	455
5.10 Of Monuments and Missions: Architectural Affiliates	457
5.10.1 Strategies, Tactics, and Symbolism in an Architectural Constellation	457
5.10.2 The German Fountain	459
5.10.3 Strategic Monuments: Kütahya, Konya, Damascus, Haifa	465
5.10.4 Tactical Monuments: The Taurus Mountains	470
5.10.5 Imperial Symbols: Yıldız and Hereke	473
5.10.6 The Auguste-Viktoria-Stiftung in Jerusalem	476
5.10.7 The German Colony at Haifa	480
5.10.8 The German Embassy at Taksim and Residence at Tarabya	483
5.10.9 Germania Han	485
5.10.10 German Schools in İstanbul	486
5.10.11 The Vefa Kilise Mosque Minaret	488
5.10.12 German Adaptations in the Hejaz: The Meißner Residence at Ma'an and the "Henschel" and al Anbarya Mosques	490
5.11 Modern Scenographic: Ottoman Railway Urbanism	491
5.11.1 Discerning Principles of Railway Urbanism	491
5.11.2 Adventures in Urban Planning: The German Empire in Africa and China and the Colonial Paradigm of the Railway	495
5.11.3 Banja Luka, Thessaloniki, Sirkeci	498
5.11.4 Ankara, Konya, Ereğli, Bekdemir, İskenderun	502
5.11.5 Notes on the Urbanism of the Hejaz Railway and Palestinian Tributaries ..	507

5.11.6 Jaffa and the Production of a New Architectural Palette	508
5.11.7 al `Ula, Medina	510
5.11.8 German Inflections of an Ottoman Railway Urbanism	511
5.12 Conclusion	513
CONCLUSION	515
SOURCES AND BIBLIOGRAPHY	528
ILLUSTRATIONS.....	629
COPYRIGHT NOTICE	1253

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This dissertation evolved with and through a number of public forums where I received useful feedback. Different parts of Chapter One were presented in three different venues: the Center for Middle Eastern Studies at Harvard University's Graduate Student Forum, the PhD Program Forum at the Harvard Graduate School of Design and the Urban Studies Seminar at the Zentrum Moderner Orient in Berlin. Thanks are due to Aylin Yıldırım-Tschoepe, Christina Crawford, Eldra Walker, Ulrike Freitag and Nora Lafi respectively for their invitations and feedback. Chapter One also benefitted from the feedback of William Ochsenwald, Professor Emeritus of History at Virginia Tech, who

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In the process of researching this dissertation I encountered a highly plausible and potentially serendipitous fact. In 1886, my Great Great Great Great Uncle, Abram S. Hewitt, then a United States Congressman, visited the Ottoman empire and had the opportunity to meet with a young Abdülhamid II. My Great Great Great Great Uncle was a fervent believer in industry's capacity for positive social transformation and it is said that he spoke candidly with the to-be Sultan about what impressed him about the empire

and what, in his estimation, could be improved.¹ Twenty-seven years later, the Sultan's famed photographic albums trumpeting the empire's newest industrial, architectural, and infrastructural achievements, including many railway scenes, were presented to the Library of Congress as a gift and, perhaps, a way of showing my Great Great Great Great Uncle how far the Sultan had brought his empire since his visit. With this, I must also acknowledge the profound influence of family. I thank my parents, Dale Christensen and Patricia Hewitt, and my brother, Erik, for sparing nothing to educate me and furnish every intellectual opportunity imaginable. They each possess a tenacity, curiosity, and learnedness to which I aspire. Finally, I thank Robert for his *Komplizenschaft* throughout this often tough process. His intellect, patience and generosity of spirit are unmatched.

¹ Janet Kesterson, "Photos Show Empire," *Jonesboro Sun*, June 7, 1983.

NOTES ON DATES, TRANSCRIPTION AND FORMAT

Year 1 in the Islamic calendar corresponds to 620 A.D.. Throughout the dissertation, dates are primarily given in A.D.. Dates in the Islamic calendar were converted using the Gregorian-Hijri dates converter at <http://www.rabiah.com/convert/>. When precise dates cannot identify the year in A.D., a year range has been listed. When known, human birth and death dates are given in parentheses following their first mention, except for when the person is mentioned in secondary fashion, for example when referring to authors of secondary sources. When either only birth or death dates are known, they are listed as “b.” and “d.” respectively. When both birth and death dates are not known, other conventions may be used, such as “fl.”. Dates of primary sources dated to the Islamic or Hebrew calendars are typically left in their original language and are not converted in their citations in the interest of preserving their referencability.

Throughout the dissertation place names are given by their contemporary name (as of January 2014) and, at their first entry, any significant historical place names that differ are cited as they are known in English in parentheses (i.e.: Ankara [Angora]). Place names are written in English, except, given their abundance, locations within the borders of Modern Turkey where the dotted “İ” and the silent “G” have been preserved (i.e.: “İstanbul”, “Ereğli”). The exception to this rule is when a location, such as “İstanbul”, appears in the proper title of a non-Turkish source in a bibliographic citation. Names of cities formerly part of the German and Austro-Hungarian empires that are not in modern Germany or Austria tend to have German names which often are retained in contemporary German language scholarship. As such, those cities are accompanied by

their German name in parentheses upon first mention (i.e. “Banja Luka [Weina Luka]”, “Pécs [Fünfkirchen]”). Some locations that are no longer part of the Ottoman empire are mentioned by their Ottoman name and cited with their contemporary name in parentheses (i.e. Filibe [Plovdiv]). Some locations have undergone renaming irrespective of language or political events and in those cases I use the common contemporary name and cite all other common names (i.e. “İskenderun [Alexandretta]”). Original historical place names, most notably Constantinople, are retained in the bibliographic citations for primary sources only in the interest of referencability. In the citation of secondary sources, contemporary English place names are used which differ only on occasion (i.e.: “Gdansk” is listed as Danzig, “Breslau” as Wroclaw, etc.).

With regard to Turkish spellings, I have generally not transliterated certain letters commonly translated (i.e. “Celal” is not converted to “Djelal”, “Çiftehan” is not converted to “Chiftehan”). All translations from German, Modern Turkish and French, unless otherwise noted, are my own. Translations from Arabic, Russian, Hungarian, Azeri, Spanish and the languages of the Balkans utilize the most commonly accepted or most relevant academic sources. Ottoman Turkish and Arabic are cited in their original form when it has not been transliterated as well as when it is has in the sole case of the citations from *Servet-i Fünun* in Chapters 1 and 2. Words that are conventionally used in English (i.e. harem, pasha, vizier), and that appear in Webster’s Eleventh *New Collegiate Dictionary* are given without diacriticals. Given the unwieldy and inconsistent variation in the formatting of bibliographic notations marking “volume”, “issue”, “page”, etc. across the languages and eras consulted, English notations in Chicago style have been applied as the standard. All passages are translated into English in the body text and preserved in the

original in the corresponding footnote in the interest of making these excerpts readily referencable.

ABBREVIATIONS

AA	Auswärtiges Amt, Berlin
AK	Atatürk Kitaplığı, İstanbul
AKM	Atatürk Konutlu Müzesi, Ankara
AMVk	Archiv des Museums für Völkerkunde, Berlin
APAAME	Aerial Photography Archive for Archaeology in the Middle East, Perth and Oxford
As	Antikensammlung, Staatliche Museen zu Berlin, Berlin
AWM	Australian War Memorial, Canberra
Ba	Bundesarchiv, Berlin
BHsa	Bayerisches Hauptstaatsarchiv, Munich
BKa	Bayerisches Kriegsarchiv, Munich
BOA	Başbakanlık Osmanlı Arşivi, İstanbul
CSL	Conrad Schick Library, Jerusalem
CZA	Central Zionist Archives, Jerusalem
DAI	Deutsches Archäologisches Institut, Berlin
DAII	Deutsches Archäologisches Institut, İstanbul Division
DBHI	Deutsche Bank, Historisches Institut, Frankfurt
DM	Deutsches Museum, Munich
DOGA	Deutsche Orient-Gesellschaft (Archiv), Berlin
DPC	Dolmabahçe Palace Collection, İstanbul
FAM	Fratelli Alinari Museum, Florence
FhsP	Fachhochschule Potsdam, Bildarchiv der Philipp Holzmann GmbH,

	Potsdam
GSI	Gottlieb Schumacher Institute for Research of the Christian Presence in Palestine in the Modern Era, Haifa
GSPK	Geheimes Staatsarchiv Preußischer Kulturbesitz, Berlin
HAK	Historisches Archiv Krupp, Essen
HHSa	Haus-, Hof- und Staatsarchiv, Österreichisches Staatsarchiv, Vienna
IRCICA	İslam, Tarih, Sanat ve Kültür Araştırma, İstanbul
ISg	Institut für Stadtgeschichte, Frankfurt
IWM	Imperial War Museum, London
LOC	Library of Congress, Washington D.C.
LSA	Landeshauptstaatsarchiv Sachsen-Anhalt, Halle
MAE	Ministère des Affaires Etrangères, Paris
MIK	Museum für Islamisches Kunst, Staatliche Museen zu Berlin, Berlin
MK	Milli Kütüphane, Ankara
NA	National Archives of the United Kingdom, London
NLa	Niedersächsisches Landesarchiv, Wolfenbüttel
NUSC	Newcastle University Special Collections, Newcastle-upon-Tyne
OKa	Österreichisches Kriegsarchiv, Vienna
OSa	Österreichisches Staatsarchiv, Vienna
OUSC	Oxford University Special Collections, Oxford
PEF	Palestine Exploration Fund, London
SALT	SALT Research (Osmanlı Bankası Arşiv ve Araştırma Merkezi), İstanbul
SAS	Sammlung Anneliese Schauss, Bad Camberg (private)

SbB	Staatsbibliothek zu Berlin, Berlin
SIFSG	Smithsonian Institution, Freer and Sackler Galleries, Washington, D.C.
SMPK	Staatliche Museen Preußischer Kulturbesitz, Zentralarchiv, Berlin
SOHa	Hausarchiv des Bankhauses Sal. Oppenheim jr. & Cie., Köln, Max Freiherr von Oppenheim-Stiftung, Cologne
SPG	Sammlung Perthes Gotha, Universität Erfurt, Gotha
TBMM	TBMM Genel Sekreterliği (Milli Saraylar), İstanbul
TCDD	Türkiye Cumhuriyeti Devlet Demiryolları, Ankara
TUB	Technische Universität Berlin, Architekturmuseum in der Universitätsbibliothek, Berlin
UL	Universität Leipzig (Archiv), Leipzig
UW	Universität Wien (Archiv), Vienna
VAM	Victoria and Albert Museum, London
VaM	Vorderasiatisches Museum, Staatliche Museen zu Berlin, Berlin
YIVO	YIVO Institute of Jewish Research, New York
ZSaM	Zentrales Staatsarchiv, Merseburg

LIST OF ILLUSTRATIONS

Introduction

- Frontisp. I:** Map of the German-Ottoman axis and related railways. Drawing of the author.
- Frontisp. II:** Engineer and assistants measuring and surveying in the Taurus range for the Baghdad Railway, c. 1916. Ullstein Bilderdienst 00091463.

Chapter 1

- Fig. 1.1:** “Siege of Vienna by Süleyman I the Magnificent, 1529,” showing Ottoman and Austrian forces at the gates of Vienna. From Lokman, *Hünername*, 1588. İstanbul, Topkapı Palace Museum Library, Ms. 1524, fol. 257b.
- Fig. 1.2:** Map of telegraph lines in the Ottoman empire, 1874. AK DSCN5503.
- Fig. 1.3:** Friedrich List’s design for the German railway system, 1833. From Robert Krause, *Friedrich List und die erste große Eisenbahn Deutschlands. Ein Beitrag zur Eisenbahngeschichte* (Leipzig: E. Strauch, 1887).
- Fig. 1.4:** “S.T.B.”, “Railway Station, Alexandria,” 1857. VAM SD.905.
- Fig. 1.5:** Unknown designer, scale model of railway car designed for the French Empress Eugenie by Sultan Abdülaziz, c. 1868. AKM, Inv. no. 216.
- Fig. 1.6:** Ali Rıza Pasha, Railroad station at Haydarpaşa, between 1880 and 1893, Abdul Hamid II Collection. LOC lot 9523, no. 28.
- Fig. 1.7:** Guillaume Gustave Berggren, view of grain silos at the port of İzmit, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.
- Fig. 1.8:** Adalbert von Rößler, Illustration of participants in the Congo Conference, Berlin, 1884, *Allgemeine Illustrierte Zeitung* (308).
- Fig. 1.9:** Garabed Krikorian, Railway station at Jerusalem during the opening ceremony, 1892. PEF P 2595.
- Fig. 1.10:** *Servet-i Fünun* cover announcing the completion of the Eskişehir-Ankara line, 1890.

- Fig. 1.11:** Unknown, artist's interpretation of Philipp Holzmann GmbH's construction of the railway in German East Africa (Tanzania), c. 1896. ISg W 1/2 278.
- Fig. 1.12:** Fausto Zonaro, "The Arrival of Kaiser Wilhelm II at the Şale," 1899, DPC, inv. no. 11/1200.
- Fig. 1.13:** Kaiser Wilhelm and Empress Auguste Viktoria being received at the pavilion at Hereke, 1898. IRCICA photograph archive, 90483-5.
- Fig. 1.14:** American Colony Jerusalem, Kaiser Wilhelm II and Empress Auguste Victoria leading the royal cortege past the German Lutheran Church of the Redeemer in Jerusalem, Palestine, which they dedicated on October 31, 1898. LOC maptc.07341.
- Fig. 1.15:** Unknown, Kaiser Wilhelm at Baalbek with sacrificial lambs, November 10, 1898. Diab Alkarssifi.
- Fig. 1.16:** Hejaz railway medallion, front, 1900. SALT Research, İsa Akbaş collection. ANUDM00249.
- Fig. 1.17:** Commemorative rail gauge, Hejaz railway, 1907. SALT Research, İsa Akbaş Collection, ANUY00019.
- Fig. 1.18:** Commemorative coins celebrating the Baghdad railway's crossing of the Taurus pass with German and Ottoman seals placed side by side, 1916. Yapı Kredi Koleksiyonu.
- Fig. 1.19:** Commemorative pill box depicting Abdüalaziz, Wilhelm and the Grand Vizier. SALT Research, İsa Akbaş Collection, ANUY00036.
- Fig. 1.20:** Commemorative figurine depicting Abdülhamid II. SALT Research, İsa Akbaş Collection, ANUY00037E001.
- Fig. 1.21:** Commemorative figurine depicting Kaiser Wilhelm II. SALT Research, İsa Akbaş Collection, ANUY00037.
- Fig. 1.22:** Ferdinand Arnodin's proposal for the Kandilli-Rumelihisar bridge, 1900. BOA VA HUS 441/174.
- Fig. 1.23:** Unknown artist, Abdülhamid II depicted as a fountain in Berlin's Tiergarten in the comic journal *Daoul*, c. 1900. AA R 14.155.
- Fig. 1.24:** Fred W. Rose, "Angling in Troubled Waters" serio-comic map of Europe, 1899. Harvard University Libraries Pusey Map Collection, G5701.A5 1899.R6.

- Fig. 1.25:** Unknown artist, *Molla Nəsrəddin / Молла Насреддин* (Azerbaijan) vol. 1 no. 12 cover with satirical view of railway construction, 1907. The Ottoman government busily feeds Germany (left) and Austria (right) at a table while others (left to right: Italy, Bulgaria, Serbia) must wait. The train set refers to the Baghdad railway. The caption reads “Osmanlı: Hələ səbr edin, sizə də verəcəyəm.” (Turks: Be patient, we’ll serve you too.) Azərbaycan Dövlət Nəşriyyatı and Çinar-Çap Nəşriyyatı.
- Fig. 1.26:** *Molla Nəsrəddin / Молла Насреддин* (Azerbaijan) vol. 1 No. 9 cover with satirical geopolitical view of Ottoman foreign relations, 1907. An Englishman tips the scales to the right towards France (2 pounds), Russia (2 pounds), and Iran (1 pound). On the left side of the balance are Italy (4 pounds), Austria (3 pounds) and Turkey (2 pounds). The caption reads “Dövlətlərin müvazinəsi edin.” (The weight of various nations.) Azərbaycan Dövlət Nəşriyyatı and Çinar-Çap Nəşriyyatı.
- Fig. 1.27:** *Molla Nəsrəddin / Молла Насреддин* (Azerbaijan) vol. 3 No. 2 cover with satirical view of railway construction, 1909. The figure on the left represents “old traditions” while the figure on the right represents “old sciences”. The train is written as “progress” while “regression” is written on the back of the cleric’s head. The caption reads “Qoymarıq qabağa gedəəsən.” (We won’t let you move forward.). Azərbaycan Dövlət Nəşriyyatı and Çinar-Çap Nəşriyyatı.
- Fig. 1.28:** *Molla Nəsrəddin / Молла Насреддин* (Azerbaijan) vol. II No. 26 cover with satirical geopolitical view of Ottoman foreign relations, 1910. According to an old Azei superstition, it is considered good luck to pour water behind oneself when travelling. Here, three European women on the train platform find themselves having water spilled upon them. The caption reads “Bakı vağzalında.” (The train station at Baku.) Azərbaycan Dövlət Nəşriyyatı and Çinar-Çap Nəşriyyatı.
- Fig. 1.29:** Unknown artist, comical depiction of Georg von Siemens in İstanbul on the cover of *Lustige Blätter*, 1900.
- Fig. 1.30:** Cover of the *L’Illustration*, October 3, 1908, depicting the inauguration of Medina station. Wikimedia Commons.
- Fig. 1.31:** Emil Heubusch, engineer of the Baghdad railway, photograph of a burnt Armenian woman in Adana, 1909. SAS.
- Fig. 1.32:** Unknown, view of German doctors treating Armenian children near the Baghdad Railway, c. 1916. Ullstein Bilderdienst 00630785.
- Fig. 1.33:** *El Dschihad* or *Al Ğihād*, newspaper published in Arabic and other

languages by the Nachrichtenstelle für den Orient for Muslim prisoners-of-war who had served in the armies of the Entente powers. The first issue appeared in Arabic on March 1, 1915. The text declares jihad on all Christians in Ottoman lands, minus the Ottoman allies.

Fig. 1.34: Austro-Hungarian Map depicting rail staging facilities in the Ottoman empire for war purposes, 1916. OSa Kt. 908.

Fig. 1.35: Unknown artist, comic view of Kaiser Wilhelm II depicted as a tailor sewing desired lands together, *Kalem*, September 11, 1914.

Fig. 1.36: Unknown, Indian prisoners of war working on the Baghdad railway, c. 1916. IWM Q 24739.

Chapter 2

Fig. 2.1: View of a German locomotive being transported across the Bosphorous, 1904. BKA bs-d 2015.

Fig. 2.2: Unknown, German colonial buildings in Tsingtao, 1900. Ba Bild 137-039348.

Fig. 2.3: Reichskolonialamt, Map of the geodetic sphere of interests of the Central Powers, c. 1914. Ba R1001/6812 K-1, fiche 1.

Fig. 2.4: “Khanjiyan,” Celebraton of the Rumelian Railway at Edirne, 1877. Ink on paper, 35 x 47 cm. Photograph: Invaluable Auctions.

Fig. 2.5: Commission des Sciences et Arts d'Égypte, *Description de l'Égypte*, colophon to vol. 1 (Paris, 1809). Biblioteca Alexndrina.

Fig. 2.6: Commission des Sciences et Arts d'Égypte, *Description de l'Égypte*, vol. V (Paris, 1829), plate 37. Biblioteca Alexndrina.

Fig. 2.7: Commission des Sciences et Arts d'Égypte, *Description de l'Égypte*, vol. XXVI (Paris, 1829), plate 5. Biblioteca Alexndrina.

Fig. 2.8: Owen Jones, *The Grammar of Ornament* (London, 1861), cover. Harvard University Libraries.

Fig. 2.9: Owen Jones, *The Grammar of Ornament* (London, 1861), plate 41. Harvard University Libraries.

Fig. 2.10: Owen Jones, *The Grammar of Ornament* (London, 1861), Egyptian no. 3, plate 1. Harvard University Libraries.

- Fig. 2.11:** David Fraser, view of the end of the Baghdad Railway near Bulgurlu c. 1908, from David Fraser, *The Short Cut to India: The Record of a Journey along the Route of the Baghdad Railway* (Edinburgh; London: W. Blackwood and Sons, 1909), 50.
- Fig. 2.12:** David Fraser, section of the Taurus Mountains, from David Fraser, *The Short Cut to India: The Record of a Journey along the Route of the Baghdad Railway* (Edinburgh; London: W. Blackwood and Sons, 1909), 56
- Fig. 2.13:** David Fraser, view of men at a coffee shop, from David Fraser, *The Short Cut to India: The Record of a Journey along the Route of the Baghdad Railway* (Edinburgh; London: W. Blackwood and Sons, 1909), 306.
- Fig. 2.14:** Unknown, depiction of an Ottoman geography classroom, *Servet-i Fünun* 648 (11 Eylül 1319).
- Fig. 2.15:** Unknown, Ottoman boys demonstrating German *Turnen* techniques, *Servet-i Fünun* 723 (17 Şubat 1320).
- Fig. 2.16:** Study of international bridges, *Servet-i Fünun* 524 (15 Mart 1317).
- Fig. 2.17:** Depiction of the new railway station at Konya, *Servet-i Fünun* 293 (10 Teşrinievvel 1312).
- Fig. 2.18:** View of the Palace of Kaykubad, *Servet-i Fünun* 292 (3 Teşrinievvel 1312).
- Fig. 2.19:** Unknown, view of railway work at Muzerib, *Servet-i Fünun* 553 (3 Teşrinievvel 1317).
- Fig. 2.20:** Unknown, view of bridge construction on the Hejaz Railway, *Servet-i Fünun* 590 (1 Ağustos 1318).
- Fig. 2.21:** Unknown, view of bridge construction on the Hejaz Railway, *Servet-i Fünun* 590 (1 Ağustos 1318).
- Fig. 2.22:** Unknown, view of earthworks on the Hejaz Railway, *Servet-i Fünun* 590 (1 Ağustos 1318).
- Fig. 2.23:** Unknown, view of earthworks on the Hejaz Railway, *Servet-i Fünun* 590 (1 Ağustos 1318).
- Fig. 2.24:** Unknown, view of construction site on the Hejaz Railway, *Servet-i Fünun* 590 (1 Ağustos 1318).

- Fig. 2.25:** Unknown, inauguration of a Hejaz Railway bridge, *Servet-i Fünun* 596 (12 Eylül 1318).
- Fig. 2.26:** Unknown, inauguration view of the Daara-Zerka railway section of the Hejaz Railway, *Servet-i Fünun* 596 (12 Eylül 1318).
- Fig. 2.27:** Unknown, view of ballast work on the Hejaz Railway, *Servet-i Fünun* 607 (28 Teşrinisani 1318).
- Fig. 2.28:** Unknown, view of foundations for Hejaz Railway station facilities, *Servet-i Fünun* 607 (28 Teşrinisani 1318).
- Fig. 2.29:** Unknown, view of Hejaz Railway station under construction, *Servet-i Fünun* 607 (28 Teşrinisani 1318).
- Fig. 2.30:** Unknown, view of water tank at Daara station on the Hejaz Railway, *Servet-i Fünun* 645 (21 Ağustos 1319).
- Fig. 2.31:** Unknown, view of Hejaz Railway tunnel, *Servet-i Fünun* 645 (21 Ağustos 1319).
- Fig. 2.32:** Unknown, view of Hejaz Railway bridge, *Servet-i Fünun* 645 (21 Ağustos 1319).
- Fig. 2.33:** Unknown, view of ceremonial train on the Hejaz Railway, *Servet-i Fünun* 645 (21 Ağustos 1319).
- Fig. 2.34:** Unknown, view of Hejaz Railway workshop, *Servet-i Fünun* 645 (21 Ağustos 1319).
- Fig. 2.35:** Unknown, view of Hejaz Railway Station at Daraa, *Servet-i Fünun* 645 (21 Ağustos 1319).
- Fig. 2.36:** Unknown, views of the Hejaz Railway, *Servet-i Fünun* 648 (11 Eylül 1319).
- Fig. 2.37:** Unknown, view of Hejaz Railway bridge near Amman, *Servet-i Fünun* 648 (11 Eylül 1319).
- Fig. 2.38:** Unknown, views of Hejaz Railway construction, *Servet-i Fünun* 648 (11 Eylül 1319).
- Fig. 2.39:** Unknown, view of Hejaz Railway culvert and embankment, *Servet-i Fünun* 651 (2 Teşrinievvel 1319).

- Fig. 2.40:** Unknown, view of Hejaz Railway workers, *Servet-i Fünun* 651 (2 Teşrinievvel 1319).
- Fig. 2.41:** Unknown, view of Hejaz Railway workers, *Servet-i Fünun* 651 (11 Eylül 1319).
- Fig. 2.42:** Unknown, view of Hejaz Railway bridge, *Servet-i Fünun* 651 (11 Eylül 1319).
- Fig. 2.43:** Unknown, view of Hejaz Railway worker camp, *Servet-i Fünun* 654 (23 Teşrinievvel 1319).
- Fig. 2.44:** Unknown, view of Hejaz Railway station, *Servet-i Fünun* 654 (23 Teşrinievvel 1319).
- Fig. 2.45:** Unknown, view of an upper Hejaz Railway station, *Servet-i Fünun* 654 (23 Teşrinievvel 1319).
- Fig. 2.46:** Unknown, view of Hejaz Railway auxiliary station building, *Servet-i Fünun* 654 (23 Teşrinievvel 1319).
- Fig. 2.47:** Unknown, view of a Hejaz Railway bridge, *Servet-i Fünun* 654 (23 Teşrinievvel 1319).
- Fig. 2.48:** Unknown, view of inauguration ceremony along the Hejaz Railway, *Servet-i Fünun* 592-593 (19 Ağustos 1318).
- Fig. 2.49:** Unknown, view of the quay facilities at Haydarpaşa under construction, *Servet-i Fünun* 591 (8 Ağustos 1318).
- Fig. 2.50:** Unknown, view of the Haydarpaşa breakwater, *Servet-i Fünun* 591 (8 Ağustos 1318).
- Fig. 2.51:** Unknown, view of quay facilities at Haydarpaşa under construction, *Servet-i Fünun* 591 (8 Ağustos 1318).
- Fig. 2.52:** Unknown, view of Haydarpaşa station under construction, *Servet-i Fünun* 896 (12 Haziran 1324).
- Fig. 2.53:** Unknown, view of a train at Haydarpaşa, *Servet-i Fünun* 592-593 (19 Ağustos 1318).
- Fig. 2.54:** Unknown, view of the port of Haydarpaşa, *Servet-i Fünun* 592-593 (19 Ağustos 1318).

- Fig. 2.55:** “R. v. Waldheim art Anst. Wien,” wood bridge over the Lim at Prijepolje on the old route to İstanbul, Geiger and Lebet, “Studien über Bosnien, die Herzegovina und die bosnischen Bahnen” (1873). DM NL 13II/26.
- Fig. 2.56:** “R. v. Waldheim art Anst. Wien,” stone bridge over the Drina at Visegrád, Geiger and Lebet, “Studien über Bosnien, die Herzegovina und die bosnischen Bahnen” (1873). DM NL 13II/26.
- Fig. 2.57:** “R. v. Waldheim art Anst. Wien,” city of Banja Luka on the Verbas River, Geiger and Lebet, “Studien über Bosnien, die Herzegovina und die bosnischen Bahnen” (1873). DM NL 13II/26.
- Fig. 2.58:** “R. v. Waldheim art Anst. Wien,” bridge at Sarajevo over the Miljacka Gorge on the old Route to İstanbul, Geiger and Lebet, “Studien über Bosnien, die Herzegovina und die bosnischen Bahnen” (1873). DM NL 13II/26.
- Fig. 2.59:** “R. v. Waldheim art Anst. Wien,” Greek church of Banja in the Lim Valley, Geiger and Lebet, “Studien über Bosnien, die Herzegovina und die bosnischen Bahnen” (1873). DM NL 13II/26.
- Fig. 2.60:** “R. v. Waldheim art Anst. Wien,” view of the church and market square of Pljevlja (Taşlıca), Geiger and Lebet, “Studien über Bosnien, die Herzegovina und die bosnischen Bahnen” (1873). DM NL 13II/26.
- Fig. 2.61:** “H,” view of Sarajevo, *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 47.
- Fig. 2.62:** Unknown, postcard of the Bistrik district of Sarajevo showing railway tunnel, c. 1904. Wikimedia Commons.
- Fig. 2.63:** R. Bernt, view of the Old bridge (Stari Most) at Mostar, *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 133.
- Fig. 2.64:** Unknown, view of Begova mosque, Sarajevo, *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 435.
- Fig. 2.65:** Unknown, interior view of mosque in Zola, *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 437.

- Fig. 2.66:** R. Bernt, view of Sarajevo madrasa, *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 439.
- Fig. 2.67:** R. Bernt, view of the Sinan Tekiye, *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 441.
- Fig. 2.68:** R. Bernt, view of the old Turkish baths in Sarajevo, *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 442.
- Fig. 2.69:** “H,” view of the “Muslim casino” in Sarajevo, *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 445.
- Fig. 2.70:** C. Pascek, view of the Sarajevo seminary, *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 447.
- Fig. 2.71:** B. Knopfmacher, view of the Sarajevo City Hall, *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 449.
- Fig. 2.72:** R. Bernt, view of railway bridge in Bosnia, *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 519.
- Fig. 2.73:** Abdullah Frères, exterior view of Sirkeci Station, between 1880 and 1893, Abdul Hamid II collection. LOC IOT 9534, no. 2.
- Fig. 2.74:** Ali Rıza Pasha, view of the Port of Haydarpaşa, between 1880 and 1893, Abdul Hamid II Collection. LOC lot 9523, no. 27.
- Fig. 2.75:** Ali Rıza Pasha, railroad station at Haydarpaşa, between 1880 and 1893, Abdul Hamid II Collection. LOC lot 9523, no. 28.
- Fig. 2.76:** Ali Rıza Pasha, side view Haydarpaşa railway station, between 1880 and

1893, Abdul Hamid II Collection. LOC lot 9523, no. 29.

- Fig. 2.77:** Unknown, the Kılınç rail bridge at Heraclea, between 1880 and 1893, Abdul Hamid II Collection. LOC lot 11915, no. 28.
- Fig. 2.78:** Unknown, view of the coke furnaces at Heraclea and their narrow gauge rail, between 1880 and 1893, Abdul Hamid II Collection. LOC lot 11915, no. 26.
- Fig. 2.79:** Abdullah Frères, German embassy at Tarabya, between 1880 and 1893, Abdul Hamid II collection. LOC lot 9516, no. 22.
- Fig. 2.80:** Theodor Rocholl, album cover, *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.81:** Theodor Rocholl, "Hilltop ruins at Gebze on the Gulf of İzmit," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.82:** Theodor Rocholl, "Greek girl," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.83:** Theodor Rocholl, "Train attendant of the Anatolian Railway," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.84:** Ottoman instruction sheet for the operation of trains, c. 1870. Courtesy Aybala-Nejat Yentürk Collection.
- Fig. 2.85:** Theodor Rocholl, "Railway track along the Gulf of İzmit," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.86:** Theodor Rocholl, "Greek house," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.87:** Theodor Rocholl, "İzmit," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.88:** Theodor Rocholl, "Circassian girl," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.89:** Theodor Rocholl, "Karasu Gorge," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.90:** Theodor Rocholl, "Farmer in Bilecik," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.

- Fig. 2.91:** Theodor Rocholl, “Farmer in Anatolia,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.92:** Theodor Rocholl, “Sea foam Merchant,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.93:** Theodor Rocholl, “Wagon driver in Eskişehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.94:** Theodor Rocholl, “Sea foam production in Eskişehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.95:** Postcard, view of a Meerschaum workshop near Eskişehir, c. 1910. Wikimedia Commons.
- Fig. 2.96:** Theodor Rocholl, “Farmer from the area of Eskişehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.97:** Theodor Rocholl, “Sea foam salesman in Eskişehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.98:** Theodor Rocholl, “Afyonkarahisar,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.99:** Theodor Rocholl, “En route to Beyşehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.100:** Theodor Rocholl, “Beyşehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.101:** Theodor Rocholl, “Door to the tomb of Süleyman bin Eshref in Beyşehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.102:** Theodor Rocholl, “Süleymaniye Mosque in Beyşehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.103:** Theodor Rocholl, “On Lake Beyşehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.104:** Theodor Rocholl, “Karaağaç,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.105:** Theodor Rocholl, “Train worker at Diliskelesi,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.

- Fig. 2.106:** Theodor Rocholl, “Kızılviran,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.107:** Theodor Rocholl, “Permata,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.108:** Theodor Rocholl, “Old bridge at Karahisar,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.109:** Theodor Rocholl, “Circassian boy in Konya,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.110:** Theodor Rocholl, “Circassian in Konya,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.
- Fig. 2.111:** Philipp Holzmann GmbH, views of Basra, c. 1915. ISg W 1/2 475.
- Fig. 2.112:** Philipp Holzmann GmbH, views of Baghdad and Basra, c. 1915. ISg W 1/2 475.
- Fig. 2.113:** Philipp Holzmann GmbH, views of Baghdad, c. 1915. ISg W 1/2 475.
- Fig. 2.114:** Philipp Holzmann GmbH, views of Baghdad, c. 1915. ISg W 1/2 475.
- Fig. 2.115:** Philipp Holzmann GmbH, view of the Russian (above) and British (below) consulates in Baghdad, c. 1915. ISg W 1/2 475.
- Fig. 2.116:** Philipp Holzmann GmbH, view of Baghdad, c. 1915. ISg W 1/2 475.
- Fig. 2.117:** Philipp Holzmann GmbH, views of Arab men and women, c. 1915. ISg W 1/2 475.
- Fig. 2.118:** Philipp Holzmann GmbH, views of worker camps in the Beledjik region, c. 1915. ISg W 1/2 475.
- Fig. 2.119:** Philipp Holzmann GmbH, various views of the Taurus and Adana regions, c. 1915. ISg W 1/2 475.
- Fig. 2.120:** Philipp Holzmann GmbH, cover of photo album *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.
- Fig. 2.121:** Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der*

Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg, 1914. ISg W 1/2 463.

Fig. 2.122: Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1914. ISg W 1/2 463.

Fig. 2.123: Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.

Fig. 2.124: Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.

Fig. 2.125: Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.

Fig. 2.126: Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.

Fig. 2.127: Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.

Fig. 2.128: Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.

Fig. 2.129: Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.

Fig. 2.130: Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der*

Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg, 1915. ISg W 1/2 463.

- Fig. 2.131:** Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.
- Fig. 2.132:** Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.
- Fig. 2.133:** Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.
- Fig. 2.134:** Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.
- Fig. 2.135:** Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.
- Fig. 2.136:** Philipp Holzmann GmbH, plate from *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg*, 1915. ISg W 1/2 463.
- Fig. 2.137:** Karl Staudinger, wartime photos of the Ottoman railways collected by the German War Office, 1915-16. BKa Bildsammlung Staudinger 13152-13154.
- Fig. 2.138:** Karl Staudinger, wartime photos of the Ottoman railways collected by the German War Office, 1915-16. BKa Bildsammlung Staudinger 13327-13328.
- Fig. 2.139:** Karl Staudinger, wartime photos of the Ottoman railways collected by the German War Office, 1915-16. BKa Bildsammlung Staudinger 13349-13350.
- Fig. 2.140:** Karl Staudinger, wartime photos of the Ottoman railways collected by the

German War Office, 1915-16. BKa Bildsammlung Staudinger 13399-13400.

- Fig. 2.141:** Karl Staudinger, wartime photos of the Ottoman railways collected by the German War Office, 1915-16. BKa Bildsammlung Staudinger 13417-13418.
- Fig. 2.142:** Unknown, view of tunnel in the Taurus Range, c. 1911-1918. FhsP 0023_002.
- Fig. 2.143:** Unknown, view of culvert in the Taurus Range, c. 1911-1918. FhsP 0023_004.
- Fig. 2.144:** Unknown, view of bridge constructions in the Taurus Range, c. 1911-1918. FhsP 0023_006.
- Fig. 2.145:** Unknown, view of Adana Station, c. 1911-1918. FhsP 0023_007.
- Fig. 2.146:** Unknown, view of tunnel in the Taurus Range, c. 1911-1918. FhsP 0023_008.
- Fig. 2.147:** Unknown, view of Meißner with German and Turkish workers in the Taurus Range, c. 1911-1918. FhsP 0023_0013.
- Fig. 2.148:** Ochs, view of bridge construction in the Taurus Range, c. 1913-1915. FhsP 18371_06.
- Fig. 2.149:** Ochs, view of bridge construction in the Taurus Range, c. 1913-1915. FhsP 18371_019.
- Fig. 2.150:** Ochs, view of cotton shipping in Adana, c. 1909-1918. FhsP 18372_61.
- Fig. 2.151:** Ochs, view of a Taurus Range station, c. 1909-1918. FhsP 18372_62.
- Fig. 2.152:** Ochs, view of cotton production in Adana, c. 1909-1918. FhsP 18372_63.
- Fig. 2.153:** Ochs, view of Bahçe station, c. 1909-1918. FhsP 18372_66.
- Fig. 2.154:** Ochs, view of the German school in Adana, c. 1909-1918. FhsP 18372_69.
- Fig. 2.155:** Ochs, view of workers' tent camp near Adana, c. 1909-1918. FhsP 18372_77.
- Fig. 2.156:** Ochs, view of cotton production in Adana, c. 1909-1918. FhsP 18372_80.

Fig. 2.157: Ochs, view of engineers and their families near Adana, c. 1909-1918. FhsP 18372_81.

Fig. 2.158: Ochs, view of track at Adana station, c. 1909-1918. FhsP 18372_90.

Fig. 2.159: Unknown, view of Jerablus station, c.1915. FhsP b4_1_0.

Chapter 3

Fig. 3.1: Louis Haghe, “Gate of Damascus, Jerusalem, April 14th 1839.” LOC illus. in NC1115.R56 1842 (Case Z).

Fig. 3.2: Johann Bernhard Fischer von Erlach, map of illustrated locations around the Mediterranean, *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), no. 5. Universitätsbibliothek Heidelberg.

Fig. 3.3: Johann Bernhard Fischer von Erlach, view of Solomon’s Temple, *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch I, Tafel II. Universitätsbibliothek Heidelberg.

Fig. 3.4: Johann Bernhard Fischer von Erlach, view of Babylon, *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch I, Tafel III. Universitätsbibliothek Heidelberg.

Fig. 3.5: Johann Bernhard Fischer von Erlach, view of Nineveh, *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch I, Tafel X. Universitätsbibliothek Heidelberg.

Fig. 3.6: Johann Bernhard Fischer von Erlach, plan and view of the Sultanahmet mosque, İstanbul, *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und*

eingeholten wahrhafften Abrißen, vor Augen zu stellen (Leipzig, 1725), Buch III, Tafel III. Universitätsbibliothek Heidelberg.

- Fig. 3.7:** Johann Bernhard Fischer von Erlach, view of the Süleymaniye mosque, *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III Tafel IV (III). Universitätsbibliothek Heidelberg.
- Fig. 3.8:** Johann Bernhard Fischer von Erlach, view of the Basilica Cistern, *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III, Tafel V. Universitätsbibliothek Heidelberg.
- Fig. 3.9:** Johann Bernhard Fischer von Erlach, view of the Hagia Sophia, *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III, Tafel VI. Universitätsbibliothek Heidelberg.
- Fig. 3.10:** Johann Bernhard Fischer von Erlach, view of Mecca, *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III, Tafel VII. Universitätsbibliothek Heidelberg.
- Fig. 3.11:** Johann Bernhard Fischer von Erlach, view of the Turkish bath of Budapest, *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III Tafel I. Universitätsbibliothek Heidelberg.
- Fig. 3.12:** Johann Bernhard Fischer von Erlach, comparison of Mosques of Bursa (left) and Hungary (right), *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III, Tafel II. Universitätsbibliothek Heidelberg.

- Fig. 3.13:** Carsten Niebuhr, map of Istanbul and environs, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen, N. Moeller etc., 1772). SbB GfE G 2216 Band 1, 28.
- Fig. 3.14:** Carsten Niebuhr, Konya, Adana and environs, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen: N. Moeller etc., 1772). SbB GfE G 2216 Band 3, 106.
- Fig. 3.15:** Carsten Niebuhr, plans of Damascus and Şanlıurfa, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen: N. Moeller etc., 1772). SbB GfE G 2216 Band 2, 408.
- Fig. 3.16:** Carsten Niebuhr, plan of Mosul, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen: N. Moeller etc., 1772). SbB GfE G 2216 Band 2, 360.
- Fig. 3.17:** Carsten Niebuhr, map of Baghdad and environs, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen: N. Moeller etc., 1772). SbB GfE G 2216 Band 2, 296.
- Fig. 3.18:** Carsten Niebuhr, map of Basra and environs, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen: N. Moeller etc., 1772). SbB GfE G 2216 Band 2, 248.
- Fig. 3.19:** Carsten Niebuhr, plan and depiction of Afyonkarahisar, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen: N. Moeller etc., 1772). SbB GfE G 2216 Band 3, 132.
- Fig. 3.20:** Fischer, plan of Konya and environs, 1838. SbB GfE N 4 1280, sheet 9.
- Fig. 3.21:** Fischer, plan of Afyonkarahisar and environs, 1838. SbB GfE N 4 1280, sheet 4, map A.
- Fig. 3.22:** Fischer, plan of Kütahya and environs, 1838. SbB GfE N 4 1280, sheet 4, map B.
- Fig. 3.23:** Fischer, Plan of Karaman and environs, 1838. SbB GfE N 4 1280, sheet 4, map C.
- Fig. 3.24:** Karl von Vincke, Plan of Ankara, 1839. SbB 44807, sheet 11.

- Fig. 3.25:** Karl Weule, “Regarding the cartography of East Africans,” (Part 1) from *Petermann’s Mitteilungen*, 1906. SPG Geogr 4° 00022/01 (61).
- Fig. 3.26:** Karl Weule, “Regarding the cartography of East Africans,” (Part 2) from *Petermann’s Mitteilungen*, 1906. SPG Geogr 4° 00022/01 (61).
- Fig. 3.27:** Wilhelm von Pressel (attributed), Mediterranean to Persian Gulf tracing with detail of the Gulf of İskenderun, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.28:** Wilhelm von Pressel (attributed), Mediterranean-Baghdad tracing, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.29:** Wilhelm von Pressel (attributed), plan of Baghdad, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.30:** Wilhelm von Pressel (attributed), plan of Tuz Khormato and environs, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.31:** Wilhelm von Pressel (attributed), plan of Kirkuk and environs, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.32:** Wilhelm von Pressel (attributed), plan of Mosul and environs, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.33:** Wilhelm von Pressel (attributed), train study, Zakho and environs, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.34:** Wilhelm von Pressel (attributed), urban studies folio; Antakya, Aleppo, Gaziantep, Birecik, Şanlıurfa, Diyarbakır, Mardin, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.35:** Wilhelm von Pressel (attributed), urban studies folio; Antakya (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.36:** Wilhelm von Pressel (attributed), urban studies folio; Aleppo (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.37:** Wilhelm von Pressel (attributed), urban studies folio; Birecik (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.38:** Wilhelm von Pressel (attributed), urban studies folio; Diyarbakır (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.39:** Wilhelm von Pressel (attributed), urban studies folio; Mardin (detail), c.

1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.

- Fig. 3.40:** Wilhelm von Pressel (attributed), urban studies folio; Gaziantep (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.41:** Wilhelm von Pressel (attributed), urban studies folio; Şanlıurfa (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.42:** Wilhelm von Pressel (attributed), city and port study of İskenderun, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.43:** Wilhelm von Pressel (attributed), Haydarpaşa, Kadıköy, Üsküdar and environs, c. 1872. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.44:** Guillaume Gustave Berggren, view of Sapanca station, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.
- Fig. 3.45:** Wilhelm von Pressel (attributed), partial İzmit–Eskişehir tracing along the Sakarya River, c. 1872. DMNL 13 / II Schachtel 017. Photo: Deutsches Museum.
- Fig. 3.46:** Wilhelm von Pressel (attributed), wooden railway trace, Kostajnica-Novi Grad (Bosnia), c. 1872. DM NL 13 / II Schachtel 021. Photo: Deutsches Museum.
- Fig. 3.47:** Josef Černík, expedition study, Euphrates and Tigris basins, 1875. SPG *Petermann's Mitteilungen*, Geogr 4° 00021/01(10,44).
- Fig. 3.48:** Josef Černík, expedition study, Baghdad, Kirkuk and environs, 1875. SPG *Petermann's Mitteilungen*, Geogr 4° 00021/01(10,44).
- Fig. 3.49:** Josef Černík, expedition study, Gulf of Alexandretta and environs, 1876. SPG *Petermann's Mitteilungen*, Geogr 4° 00021/01(10,45).
- Fig. 3.50:** Josef Černík, expedition study, Mosul, Erbil, and environs, 1876. SPG *Petermann's Mitteilungen*, Geogr 4° 00021/01(10,45).
- Fig. 3.51:** Josef Černík, expedition study, geological and ethnographic overviews, 1876. SPG *Petermann's Mitteilungen*, Geogr 4° 00021/01(10,45).
- Fig. 3.52:** Gottlieb Schumacher, plan (F. Z. Weller) of Beiruts, 1885, *Abila of the Decapolis* (London: Palestine Exploration Fund, 1889), 154.
- Fig. 3.53:** Gottlieb Schumacher, western theater at Umm Qais, *Abila of the Decapolis* (London: Palestine Exploration Fund, 1889), 59.

- Fig. 3.54:** Gottlieb Schumacher, view of a natural rock bridge at Tell Hamma, *Abila of the Decapolis* (London: Palestine Exploration Fund, 1889), 70.
- Fig. 3.55:** Baghdad Railway Company, detail view of map depicting Baghdad, c. 1908. DBHI OR1712.
- Fig. 3.56:** Baghdad Railway Company, detail view of map depicting Samarra, c. 1908. DBHI OR1712.
- Fig. 3.57:** Karl Auler “Pasha”, map of the Hejaz Railway with projected line to Mecca, 1906. SPG *Petermann’s Mitteilungen*, Geogr 4° 00022/01(33,154).
- Fig. 3.58:** Karl Auler “Pasha”, map of the Hejaz Railway with projected line to Mecca, 1908. SPG *Petermann’s Mitteilungen*, Geogr 4° 00022/01(34,161).
- Fig. 3.59:** Karl Auler “Pasha”, view of Ma’an, “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 1,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 154 (1906). SPG / Universität Erfurt Signatur SPA 4° 000099 (70).
- Fig. 3.60:** Karl Auler “Pasha”, view of a medallion ceremony on the Hejaz Railway. “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 1,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 154 (1906). SPG / Universität Erfurt Signatur SPA 4° 000099 (72).
- Fig. 3.61:** Karl Auler “Pasha”, view of sandstone structures near ad-Dar al-Hamra. “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (Fig. 8).
- Fig. 3.62:** “Karl Auler Pasha”, rock structure near El Mushim. “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (34).
- Fig. 3.63:** “Karl Auler Pasha”, antique tomb portal at Meda’in Saleh. “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (38).
- Fig. 3.64:** Karl Auler “Pasha”, shrubbery around Meda’in Saleh. “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2,” in:

Dr. A. Petermanns Mitteilungen aus Justus Perthes' Geographischer Anstalt 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (42).

- Fig. 3.65:** Karl Auler “Pasha”, palm forests near Ma’an. Karl Auler (“Pasha”), “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes' Geographischer Anstalt* 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (48).
- Fig. 3.66:** Karl Auler “Pasha”, Bedouins near Ma’an. “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes' Geographischer Anstalt* 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (49).

Chapter 4

- Fig. 4.1:** Unknown, portrait of Robert Koldewey given to him as a gift in Assos, September 10, 1883. From Reinhard Lullies, Wolfgang Schiering, eds., *Archäologenbildnisse: Porträts und Kurzbiographien von klassischen Archäologen deutscher Sprache / Deutsches Archäologisches Institut; mit Beiträgen zahlreicher Fachgenossen* (Mainz am Rhein: Zabern, 1988), 116.
- Fig. 4.2:** Louis-François Cassas, “Personnages dans les Ruines du Temple de Bacchus à Baalbek,” aquarelle, 65 x 90 cm., c. 1820, © Blouin.
- Fig. 4.3:** James Stuart and Nicholas Revett, depiction of the Hephaisteion, from *Antiquities of Athens* (London, 1762), vol. 3, ch. 1, plate 1.
- Fig. 4.4:** Unknown, Carl Humann, his family, Alexander Conze and colleagues at Carl Humann’s residence in Bergama, c. 1886. As.
- Fig. 4.5:** Foreword page, Gustav Körte and Alfred Körte, *Ergebnisse der Ausgrabung im Jahre 1900* (Berlin: Georg Reimer, 1904), vii.
- Fig. 4.6:** Detail of railway trace map showing Gordium and environs on the Eskişehir-Angora line. DBHI OR 370.
- Fig. 4.7:** Author’s diagram depicting the siting of Gordium in relation to the Anatolian Railway branch line to Ankara and the Beylikköprü.
- Fig. 4.8:** Plate from Gustav Körte, Alfred Körte, *Ergebnisse der Ausgrabung im Jahre 1900* (Berlin: Georg Reimer, 1904), i.
- Fig. 4.9:** Unknown photographer from the Deutsches Archäologisches Institute,

Athens division, view of excavation of Tumulus B at Gordium, c. 1900. DAII fotothek R 35.836.

- Fig. 4.10:** Guillaume Gustave Berggren, view of the column of Emperor Augustus at Ankara, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 9.
- Fig. 4.11:** Guillaume Gustave Berggren, view of the Konya tower kiosk, near Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 7.
- Fig. 4.12:** Guillaume Gustave Berggren, view of İnce Minareli Madrassa, Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 7.
- Fig. 4.13:** Guillaume Gustave Berggren, view of “Aya Sofia,” Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 7.
- Fig. 4.14:** Guillaume Gustave Berggren, view of Phrygian statues at Kal-Khane, near Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.
- Fig. 4.15:** Guillaume Gustave Berggren, Phrygian and classical sculptural reliefs at the old Bedesten, Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.
- Fig. 4.16:** Guillaume Gustave Berggren, view of Sultan Han, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.
- Fig. 4.17:** Guillaume Gustave Berggren, Midas monument at Yazılıkaya near Eskişehir, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.
- Fig. 4.18:** Ernest Breton, “Tombeau de Midas” from *Monuments de tous les Peuples* (Brussels: Librairie Historique-Artistique, 1843) tome I, plate XLV.
- Fig. 4.19:** Guillaume Gustave Berggren, an unidentified man and three boys at the Phrygian acropolis at Yazılıkaya near Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.
- Fig. 4.20:** Guillaume Gustave Berggren, view of man aside Phrygian ruins near Hamam, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 II.
- Fig. 4.21:** Detail of railway trace map showing Zincirli and environs along the Baghdad Railway. DBHI OR 1716.
- Fig. 4.22:** Felix von Luschan, images of Armenian men from Eugen Petersen, Felix von Luschan, eds., *Reisen in Lykien Milyas und Kibyratıs* (Vienna: Carl Gerold, 1889), plate XXXIV.
- Fig. 4.23:** Felix von Luschan, comparison of human skulls from various ethnic

groups from the Zincirli region from Eugen Petersen, Felix von Luschan, eds., *Reisen in Lykien Milyas und Kibyratis* (Vienna: Carl Gerold, 1889), figs. 92-96, 112.

- Fig. 4.24:** Unknown, Felix von Luschan with workmen in front of the discovery of two double-sphinx column bases from the portico of an Iron Age palace on the upper mound of Sam'al. The railway station can be seen in the distant background. Photograph: University of Chicago Libraries. The railway station can be seen in the distant background.
- Fig. 4.25:** Female head types in bronze sculptures from Benin from Felix von Luschan, *Die Altertümer von Benin* (Berlin and Leipzig: Vereinigung wissenschaftlicher Verleger Walter de Gruyter & Co., 1919), plate 54.
- Fig. 4.26:** Felix von Luschan, images of Lycian Turks from Eugen Petersen, Felix von Luschan, eds., *Reisen in Lykien Milyas und Kibyratis* (Vienna: Carl Gerold, 1889), plate XXXVI.
- Fig. 4.27:** Felix von Luschan, images of Turkic men from Eugen Petersen and Felix von Luschan, eds., *Reisen in Lykien Milyas und Kibyratis* (Vienna: Carl Gerold, 1889), plate XXXII.
- Fig. 4.28:** Felix von Luschan, images of Gypsy (Roma) men from Eugen Petersen and Felix von Luschan, eds., *Reisen in Lykien Milyas und Kibyratis* (Vienna: Carl Gerold, 1889), plate XXXIX.
- Fig. 4.29:** Max Von Oppenheim, plan of an Armenian church at Viranşehir, c. 1900. SOHA Von Oppenheim Nachlass, Nr. 100.
- Fig. 4.30:** Max Von Oppenheim, details of an Armenian church at Viranşehir, c. 1900. SOHA Von Oppenheim Nachlass, Nr. 100.
- Fig. 4.31:** Max Von Oppenheim, details of an Armenian church at Viranşehir, c. 1900. SOHA Von Oppenheim Nachlass, Nr. 100.
- Fig. 4.32:** Detail of railway trace map showing Tell Halaf and environs on the Baghdad Railway line. DBHI OR 1716.
- Fig. 4.33:** Unknown, the photo studio at the Tell Halaf expedition house. SOHa Fotosammlung Max von Oppenheim Bildsignatur 783.
- Fig. 4.34:** Unknown, view of the expedition house at Tell Halaf. SOHa Fotosammlung Max von Oppenheim 7400.
- Fig. 4.35:** Unknown, Baghdad Railway engineers outside a tent at Hammam Ali, c. 1911. SOHa Fotosammlung Max von Oppenheim 5062.

- Fig. 4.36:** Unknown, Baghdad Railway in front of the Tektek Mountains, 1913. SOHa Fotosammlung Max von Oppenheim 2435.
- Fig. 4.37:** Unknown, Baghdad Railway engineers gathered in a tent at Djirdjib, c. 1911. SOHa Fotosammlung Max von Oppenheim 4566.
- Fig. 4.38:** Unknown, view of the expedition house at Tell Halaf, c. 1911. SOHa Fotosammlung Max von Oppenheim 4611.
- Fig. 4.39:** Gottlieb Schumacher, sketch of Tell Meggido, the rail branch to Haifa and environs, 1893. PEF DA-SHCUM-37.3.
- Fig. 4.40:** Unknown, possibly Bruno Schulz, view of initial fieldwork at Mshatta, c. 1907. MIK 811-1.
- Fig. 4.41:** Bruno Schulz, plan and elevation of Mshatta, 1903. SMPK file ZA 2.11.
- Fig. 4.42:** Gottlieb Schumacher [attributed], hand-drawn map of the Hejaz Railway and the location of the Mshatta Façade, noting possible transportation routes, 1902. SMPK I/IM 6. Note: the initials “JE” appear in the bottom right hand corner which may indicate a connection to Julius Euting.
- Fig. 4.43:** Ernst Herzfeld, groundplans of private houses containing the locations of wall ornamentation at the excavation of Samarra, c. 1912. SIFSG accession no. FSA A.6 S30.
- Fig. 4.44:** Unknown, Gertrude Bell visiting with German archaeologists at Assur, April 1909. NUSC Gertrude Bell photographs collection, Q225.
- Fig. 4.45:** H. Foellner (Chief Engineer of the Baghdad Railway), drawing of the Aleppo Room. Excerpted from Julia Gonella, *Ein-christlich-orientalisches Wohnhaus des 17. Jahrhunderts aus Aleppo (Syrien). Das ‘Aleppo-Zimmer’ im Museum für Islamische Kunst* (Berlin: Staatliche Museen zu Berlin – Preußischer Kulturbesitz, 1996), plate 21.
- Fig. 4.46:** Staatliche Museen zu Berlin, View of the Aleppo Room in situ. SMPK ZA 2.11/3321.
- Fig. 4.47:** Unknown, possibly Ernst Herzfeld, view of Ernst Herzfeld’s excavation camp at Samarra, c. 1912. SIFSG accession no. FSA A.6 04.20.171.
- Fig. 4.48:** Unknown, view of Samarra, c. 1912. SIFSG accession no. FSA A.6 04.23.064.

Chapter 5

- Fig. 5.1:** Ottoman railway network map, c. 1914. AK Htr Gec 00063.
- Fig. 5.2:** Unknown, Hejaz Railway laborers, 1903. Wikimedia Commons.
- Fig. 5.3:** Paul Zepdji, Balkan railway labor force in front of unidentified station (detail), c. 1894. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.
- Fig. 5.4:** American Colony Jerusalem, young Arab stoneworkers on the Baghdad Railway east of Aleppo, c. 1910. LOC LC-M32-13795.
- Fig. 5.5:** American Colony Jerusalem, woodworkers on the Baghdad Railway east of Aleppo, c. 1910. LOC LC-M32-13787.
- Fig. 5.6:** A railway bridge structure north of Belededik completed in two phases, partly in stone and partly in concrete. Photograph of the author.
- Fig. 5.7:** Emil Heubusch, photograph with written annotations noting the quarantined barracks for workers stricken with cholera at Toprakkale, 1913. SAS.
- Fig. 5.8:** Unknown, tent camp near the Taurus Mountains for the construction of the Baghdad railway, c. 1918. DAII fotothek 26.602. ©DAI.
- Fig. 5.9:** Varda viaduct, view from north. Photograph of the author.
- Fig. 5.10:** Unknown, auxiliary bridge and the Varda viaduct, c. 1915. Courtesy Gunter Hartnagel.
- Fig. 5.11:** Unknown, view of the construction of the Varda viaduct, c. 1910. BKa bs-d 2001.
- Fig. 5.12:** Detail view of central span of the Varda viaduct from southwest. Photograph of the author.
- Fig. 5.13:** Unknown, view of an ashlar pier for an iron railway bridge near completion in Palestine, 1910-11. *Salname-yi Beyrut* [as shown in Zeynep Çelik, *Empire, Architecture and the City* (Seattle: University of Washington Press, 2008), 32].
- Fig. 5.14:** American Colony Jerusalem, view of the provisional wooden railway bridge over the Euphrates, c. 1910. LOC matpc 04668.
- Fig. 5.15:** Unknown, view of the Euphrates railway bridge, c. 1917. Courtesy Bill

Milhomme.

- Fig. 5.16:** Unknown, depiction of irrigation dam built in conjunction with the Baghdad railway in the Cilician Plain, near Konya, 1911, *Reisebericht für die Anatolische Eisenbahn-Gesellschaft* (1912).
- Fig. 5.17:** Unknown, depiction of grains studied for the irrigation projects built in conjunction with the Baghdad railway in the Cilician Plain, near Konya, 1911, from the *Reisebericht für die Anatolische Eisenbahn-Gesellschaft* (1912).
- Fig. 5.18:** Haithem Hammad, ten arches railway bridge near Amman, completed 1902.
- Fig. 5.19:** Unknown, view of the bridge at Wadi Ithil, c. 1908. Photograph: © Christies.
- Fig. 5.20:** Unknown, possibly Lieutenant Colonel C. Guy Powles, photograph of the Asluj railway bridge after its destruction by the Allied Forces in World War I. From Lieutenant Colonel C. Guy Powles, *The New Zealanders in Sinai and Palestine* (Auckland, Whitcombe and Tombs Limited, 1922), 113.
- Fig. 5.21:** Paul Zepdji, rail ridge at Vardar, c. 1894. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.
- Fig. 5.22:** Guillaume Gustave Berggren, view of the Anatolian Railway, bridge between Mekece and Osmaneli stations over the Sakarya River, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.
- Fig. 5.23:** Rail tunnel north of Belemelik. Photograph of the author.
- Fig. 5.24:** Max Meyer Sperling, *Heimatstil* residential development on Vienna's Hasenauerstraße, seen from Gregor-Mendel-Straße, 1900. From Helfried Seemann, Christian Lunzer, eds., *Döbling Album 1860-1930* (Vienna: Verlag für Photographie, 1991).
- Fig. 5.25:** Dobrljin station, track side (2011). Photograph: Jan Přikryl.
- Fig. 5.26:** Postcard depicting the Banja Luka train station, city side, date unknown. Collection of the author.
- Fig. 5.27:** Postcard depicting the Edirne train station, track side, date unknown. Collection of the author.
- Fig. 5.28:** Postcard depicting the Filibe train station, track side, date unknown.

Collection of the author.

- Fig. 5.29:** Railway building at Belovo. Wikimedia Commons.
- Fig. 5.30:** Skobelovo station. Wikimedia Commons.
- Fig. 5.31:** Unknown, Üsküb station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.
- Fig. 5.32:** Unknown, Agoustos station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.
- Fig. 5.33:** Unknown, Guida-Kapsohora station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.
- Fig. 5.34:** Unknown, Karaferia station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.
- Fig. 5.35:** Unknown, Ekchisou station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.
- Fig. 5.36:** Unknown, Vertekop station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.
- Fig. 5.37:** Unknown, Ostrovo station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.
- Fig. 5.38:** Sirkeci station, longitudinal elevation, north street side. TCDD, Sirkeci.
- Fig. 5.39:** Sirkeci station, exterior view, north entry. Photograph of the author.
- Fig. 5.40:** Sirkeci station, detail of clock and tower on north entry. Photograph of the author.
- Fig. 5.41:** Sirkeci station, north entry. Photograph of the author.
- Fig. 5.42:** Sirkeci station, window detail. Photograph of the author.
- Fig. 5.43:** Sirkeci station, north entry, fenestration and cladding detail. Photograph of the author.
- Fig. 5.44:** Sirkeci station, window grill detail. Photograph of the author.
- Fig. 5.45:** Sirkeci station, interior view, main waiting hall. Photograph of the author.

- Fig. 5.46:** Sirkeci station, interior view, restaurant. Photograph of the author.
- Fig. 5.47:** Sirkeci station, interior view, main waiting hall, wall detail. Photograph of the author.
- Fig. 5.48:** Sirkeci station, exterior view, track side. Photograph of the author.
- Fig. 5.49:** Postcard depicting the port of Haydarpaşa, c. 1878. Wikimedia Commons.
- Fig. 5.50:** Postcard depicting the port of Haydarpaşa, c. 1878. SALT Research AHAYD008.
- Fig. 5.51:** Postcard depicting the passport bureau at the port of Haydarpaşa, c. 1878. SALT Research AHAYD001.
- Fig. 5.52:** Göztepe station, frontal elevation. TCDD 10A-3336/1.
- Fig. 5.53:** Göztepe station, plan. TCDD 10A-3336/2.
- Fig. 5.54:** Kızıltoprak station, latitudinal section and elevation. TCDD 2G-487/2,3.
- Fig. 5.55:** Kızıltoprak station, track side elevation. TCDD 2G-487/1.
- Fig. 5.56:** Kızıltoprak station, plan. TCDD 2G-487/4.
- Fig. 5.57:** View of the Fenerbahçe train station, c. 1872. www.kentvedemiryolu.com.
- Fig. 5.58:** Guillaume Gustave Berggren, view of the depots at the port of İzmit, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.
- Fig. 5.59:** Guillaume Gustave Berggren, view of railway's traversal through İzmit, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.
- Fig. 5.60:** İzmit station (old), elevations. TCDD 10 A-443/1.
- Fig. 5.61:** İzmit station (new), exterior view, main hall from southeast. Photograph of the author.
- Fig. 5.62:** Beylikköprü station, track side. Photograph of the author.
- Fig. 5.63:** Bozüyük station, elevations. TCDD 10 A-74/1.
- Fig. 5.64:** Sabuncupınar station, track side. Photograph: Mehmet Yavuz.
- Fig. 5.65:** Postcard depicting Afyonkarahisar station, city side. Wikimedia

Commons.

- Fig. 5.66:** Afyonkarahisar station, plan. TCDD Afyonkarahisar.
- Fig. 5.67:** Bilecik station building, exterior view. Photograph of the author.
- Fig. 5.68:** Guillaume Gustave Berggren, view of Eskişehir station, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 9.
- Fig. 5.69:** Ankara and Eskişehir stations, longitudinal section and elevation. TCDD 10 A290/1.
- Fig. 5.70:** Guillaume Gustave Berggren, view of Eskişehir station (roof detail), c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 9.
- Fig. 5.71:** Guillaume Gustave Berggren, view of Eskişehir station (detail of ground level), c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 9.
- Fig. 5.72:** View of one of the few remaining signs noting the women's waiting room, railway station at Sabuncupınar, from c. 1892. Photo: Mehmet Yavuz.
- Fig. 5.73:** Exterior view, Ibis Hotel, formerly a grain silo adjacent to the Eskişehir railway station. Photograph of the author.
- Fig. 5.74:** Exterior view, grain silo adjacent to the Afyonkarahisar railway station. Photograph of the author.
- Fig. 5.75:** Çakmak station, water tower. Photograph of the author.
- Fig. 5.76:** Çiftehan station, water tower. Photograph of the author.
- Fig. 5.77:** Çakmak station, fencing detail. Photograph of the author.
- Fig. 5.78:** Konya station, track side elevation. TCDD 10 A-492-2.
- Fig. 5.79:** Unknown, leaflet depicting the new station at Konya with the new regional court, c. 1896. Wikimedia Commons.
- Fig. 5.80:** Konya station, main hall, ceiling and column detail. Photograph of the author.
- Fig. 5.81:** Konya station, main hall, frieze painting (detail). Photograph of the author.
- Fig. 5.82:** Konya station, main hall, frieze painting (detail). Photograph of the author.

- Fig. 5.83:** Konya station, main hall, frieze painting (detail). Photograph of the author.
- Fig. 5.84:** Konya station, main hall, frieze painting (detail). Photograph of the author.
- Fig. 5.85:** Konya station, main hall, frieze painting (detail). Photograph of the author.
- Fig. 5.86:** Konya station, view of workers' colony. Photograph of the author.
- Fig. 5.87:** Plans and elevations of the Krupp worker colony at Berndorf. *Allgemeine Bauzeitung* 77 (1912), Tafel 12.
- Fig. 5.88:** Konya station, fence detail. Photograph of the author.
- Fig. 5.89:** Konya station, workers' colony, kitchen detail. Photograph of the author.
- Fig. 5.90:** Konya station, workers' colony, wallpaper detail. Photograph of the author.
- Fig. 5.91:** Konya station, view of swing set on front lawn of workers' colony. Photograph of the author.
- Fig. 5.92:** Konya station, view of stationmaster's residence. Photograph of the author.
- Fig. 5.93:** Konya station, view of depot. Photograph of the author.
- Fig. 5.94:** Konya station, exposed rail gauge as part of the fencing for an outdoor patio of an engineer's house with the inscription "Krupp 1898" referring to the steel manufacturer – Krupp of Essen – and the year in which it was made. Photograph of the author.
- Fig. 5.95:** Exterior view, commercial building adjacent to station built in conjunction with the construction of Konya station. Photograph of the author.
- Fig. 5.96:** Guillaume Gustave Berggren, government konak, Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.
- Fig. 5.97:** Garaved K. Sokakian, postcard depicting the industrial school in Konya, c. 1901. SALT Research AHKON001.
- Fig. 5.98:** Unknown, Tabuk station, track side, c. 1909. Photograph: Durham

University.

- Fig. 5.99:** al 'Ula station, auxiliary buildings. Photograph: Hamad Raza.
- Fig. 5.100:** Abu Na'am station and environs. Photograph: James Nicholson.
- Fig. 5.101:** Muazzam station, entry side. Photograph: Nabataea.net.
- Fig. 5.102:** Abu Na'am station, view of iron rungs set into the walls for defense purposes. Photograph: Matthew Sutherland.
- Fig. 5.103:** Unknown, view of conscripts constructing Muazzam station. IWM.
- Fig. 5.104:** Muheit station, barracks and blockhouse. Photograph: Roger Bragger.
- Fig. 5.105:** Al Qadam station. Photograph: Gunter Hartnagel.
- Fig. 5.106:** Lieutenant Thomas Gerald George Fahey, view of Damascus main station, c. 1915. Photograph: Newcastle University Cultural Collections, Robinson Family Collection.
- Fig. 5.107:** Aerial view of al 'Ula station and environs. APAAME 20020930 RHB-0049.
- Fig. 5.108:** Medina railway station and environs. Photograph: Ahmet Ersungur.
- Fig. 5.109:** Medina station, frontal view. Photograph: Ahmet Ersungur.
- Fig. 5.110:** Medina station, side view. Photograph: Mehmet Akif.
- Fig. 5.111:** Medina station, window detail. Photograph: James Nicholson.
- Fig. 5.112:** Medina station, capital detail. Photograph: James Nicholson.
- Fig. 5.113:** Postcard depicting the railway station at Haifa, c. 1902. Photograph: Regency Superior Auctions.
- Fig. 5.114:** "H.W.", section of proposal for the port of Haydarpaşa, c. 1878. AA R14157.
- Fig. 5.115:** Postcard depicting the port of Haydarpaşa, c. 1878. Wikimedia Commons.
- Fig. 5.116:** Alexander Vallaury, ceremonial column on breakwater at Haydarpaşa. Photograph of the author.

- Fig. 5.117:** Hellmuth Cuno for Philipp Holzmann GmbH, two designs for Haydarpaşa station, c. 1904. ISg FP003566 (left) and FP003565 (right).
- Fig. 5.118:** Haydarpaşa station, entry portal, detail showing the *tuğra* of Sultan Abdulhamid II. Photograph of the author.
- Fig. 5.119:** Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, ground level plan. ISg W1/2 369.
- Fig. 5.120:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of main façade. ISg W1/2 369.
- Fig. 5.121:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of administrative entry. ISg W1/2 369.
- Fig. 5.122:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, façade detail. ISg W1/2 369.
- Fig. 5.123:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, façade detail. ISg W1/2 369.
- Fig. 5.124:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of entry to post office. ISg W1/2 369.
- Fig. 5.125:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view towards Bosphorus. ISg W1/2 369.
- Fig. 5.126:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view towards Bosphorus. ISg W1/2 369.
- Fig. 5.127:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view from railyards. ISg W1/2 369.
- Fig. 5.128:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of main hall. ISg W1/2 369.
- Fig. 5.129:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of main hall. ISg W1/2 369.
- Fig. 5.130:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of main hall. ISg W1/2 369.
- Fig. 5.131:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of administrative entry hall. ISg W1/2 369.

- Fig. 5.132:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, administrative stairway. ISg W1/2 369.
- Fig. 5.133:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, administrative stairway. ISg W1/2 369.
- Fig. 5.134:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, waiting room corridor. ISg W1/2 369.
- Fig. 5.135:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, restaurant. ISg W1/2 369.
- Fig. 5.136:** Haydarpaşa station, interior view, main hall, ceiling detail. Photograph of the author.
- Fig. 5.137:** Haydarpaşa station, east elevation. TCDD Haydarpaşa.
- Fig. 5.138:** Haydarpaşa station, main (northern) elevation. TCDD Haydarpaşa.
- Fig. 5.139:** Haydarpaşa station, west elevation (partial). TCDD Haydarpaşa.
- Fig. 5.140:** Haydarpaşa station, south tower detail. Photograph of the author.
- Fig. 5.141:** Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, ground level plan. ISg W1/2 369.
- Fig. 5.142:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of first and second class waiting room. ISg W1/2 369.
- Fig. 5.143:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of third class waiting room. ISg W1/2 369.
- Fig. 5.144:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, saloon and restaurant entrance, Kadıköy (south) side. ISg W1/2 369.
- Fig. 5.145:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of stairwell in administrative sector. ISg W1/2 369.
- Fig. 5.146:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of the General Director's office. ISg W1/2 369.

- Fig. 5.147:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of main entry hall. ISg W1/2 369.
- Fig. 5.148:** Haydarpaşa station, main hall, detail of ornamental scheme. Photograph of the author.
- Fig. 5.149:** Haydarpaşa station, front entry, detail of doors and stained glass. Photograph of the author.
- Fig. 5.150:** Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of restaurant and tiled walls (detail). ISg W1/2 369.
- Fig. 5.151:** Ayrancıderbent station, ticket window (detail). Photograph: Mehmet Yavuz.
- Fig. 5.152:** Guillaume Gustave Berggren, Ereğli station, view from south. Wikimedia Commons.
- Fig. 5.153:** Ereğli station, exterior view, engineer or stationmaster's house. Photograph of the author.
- Fig. 5.154:** Ulukışla station, detail of worker's house. Photograph of the author.
- Fig. 5.155:** Ulukışla station, worker's house. Photograph of the author.
- Fig. 5.156:** Pozantı station, interior view, depot. Photograph of the author.
- Fig. 5.157:** Pozantı station, interior view, depot. Photograph of the author.
- Fig. 5.158:** Pozantı station, exterior view, depot. Photograph of the author.
- Fig. 5.159:** Durak station, track side. Photograph of the author.
- Fig. 5.160:** Cilician region station prototype, Class III, Type II, plan. TCDD A-154, 4.
- Fig. 5.161:** Durak station, railside portico. Photograph of the author.
- Fig. 5.162:** Durak station, exterior view, northern façade. Photograph of the author.
- Fig. 5.163:** Durak station, eave detail. Photograph of the author.
- Fig. 5.164:** Dört Yol station, eave detail. Photograph of the author.
- Fig. 5.165:** Unknown, postcard view of Dört Yol station, c. 1912. Wikimedia Commons.

- Fig. 5.166:** Fevzipaşa station, track side. Photograph: Demiryolcuyuz.
- Fig. 5.167:** Toprakkale, exterior view, workshop. Photograph of the author.
- Fig. 5.168:** Yenice station, view from west. Photograph of the author.
- Fig. 5.169:** İskenderun station, street side. Photograph of the author.
- Fig. 5.170:** Signatures of Otto Riese (above) and Hellmuth Cuno (below) on the Cilician station drawings. TCDD 10 A-154/1.
- Fig. 5.171:** Adana station, exterior view, street side. Photograph of the author.
- Fig. 5.172:** Adana station, plan, ground level. TCDD 10 A-5/4.
- Fig. 5.173:** Unknown, Heubusch family garden in Adana, 1917. SAS.
- Fig. 5.174:** Unknown, engineer Emil Heubusch and his wife in their garden in Adana, 1917. SAS.
- Fig. 5.175:** Adana station, ticket window detail. Photograph of the author.
- Fig. 5.176:** Adana station, eave detail. Photograph of the author.
- Fig. 5.177:** Adana station, exterior niche detail (former location of a fountain). Photograph of the author.
- Fig. 5.178:** Adana station, exterior view, stationmaster's house. Photograph of the author.
- Fig. 5.179:** Yenice station, plan. TCDD 10 A-940/1.
- Fig. 5.180:** Gazi Paşa (Ankara) station, plan. Published in Mehmet Emin Başar, Hacı Abdullah Erdoğan, "Osmanlı'dan Cumhuriyet'e Türkiye'de Tren Garları," S.Ü. Müh.-Mim. Fak. *Dergisi* 24, no. 3 (2009): 36.
- Fig. 5.181:** View of Gazi Paşa (Ankara) station. Harvard University Libraries.
- Fig. 5.182:** Nusaybin station, track side. Photograph: Mehmet Yavuz.
- Fig. 5.183:** Unknown, Carchemish station, city side, under construction, c. 1913. SOHA MvO29.15.6.
- Fig. 5.184:** Max von Oppenheim, view of railway building at Jerabulus, 1912. SOHa MvO29.15.6 A.O.30.

- Fig. 5.185:** Akçakale station, track side. Photograph: Mehmet Yavuz.
- Fig. 5.186:** Akçakale station, plan. TCDD 10A-21/1.
- Fig. 5.187:** Akçakale station, door detail. Photograph: Mehmet Yavuz.
- Fig. 5.188:** Postcard depicting Aleppo station, view from city side, c. 1920. Wikimedia Commons.
- Fig. 5.189:** Max von Oppenheim, Aleppo station, view from city side while under construction, c. 1913. SOHA 29/15.6 S.34b.
- Fig. 5.190:** Aleppo station, interior view of main hall. Photograph: Mehmet Yavuz.
- Fig. 5.191:** Unknown, Aleppo station, track side, c. 1920. Wikimedia Commons.
- Fig. 5.192:** Aleppo station, window detail. Photo: Mehmet Yavuz.
- Fig. 5.193:** Unknown, Gertrude Bell, Meißner Pasha and two unidentified European men in front of Baghdad railway station buildings, 1914. NUSC Y/379.
- Fig. 5.194:** Gertrude Bell, Baghdad railway station buildings, 1914. NUSC Y/378.
- Fig. 5.195:** Postcard depicting Baghdad station, c. 1916. Wikimedia Commons.
- Fig. 5.196:** Unknown, Samarra station, track side. Photograph: Wikimedia Commons.
- Fig. 5.197:** American Colony Jerusalem, Mosul station under construction, c. 1917. LOC matpc 04662.
- Fig. 5.198:** Ibrahim Mutfarika, illustration of the *vakvak ağacı* (vak-vak tree) from *Tarik-i Hind-i garbi* (Constantinople, 1730), 159, woodcut. Brown University, John Carter Brown Archive of Early American Images, B730 T186.
- Fig. 5.199:** Max Spitta, design for a fountain in Constantinople, elevation, iteration 1. TUB 16886.
- Fig. 5.200:** Max Spitta, design for a fountain in Constantinople, section, iteration 1. TUB 16887.
- Fig. 5.201:** Max Spitta, design for a fountain in Constantinople, elevation, iteration 2. TUB 16888.
- Fig. 5.202:** Max Spitta, design for a fountain in Constantinople, plan elevation,

iteration 3. TUB 16889.

- Fig. 5.203:** Max Spitta, design for a fountain in Constantinople, elevation, iteration 4. TUB 16890.
- Fig. 5.204:** Max Spitta, design for a fountain in Constantinople, elevation, iteration 4. TUB 16891.
- Fig. 5.205:** Max Spitta, photograph of a model of a design for a fountain in Constantinople, 1899. TUB 10701.
- Fig. 5.206:** Max Spitta, design for a fountain in Constantinople, section, final iteration. TUB 16892.
- Fig. 5.207:** Max Spitta, design for a fountain in Constantinople, section, final iteration. TUB 16893.
- Fig. 5.208:** Unknown, view of the Construction of Max Spitta's German Fountain, January 27, 1901. Wikimedia Commons.
- Fig. 5.209:** Unknown, view of the Construction of Max Spitta's German Fountain, January 27, 1901. Wikimedia Commons.
- Fig. 5.210:** Unknown, view of the inauguration of the German Fountain at the Hippodrome, January 27, 1901. Wikimedia Commons.
- Fig. 5.211:** German Fountain, detail of plaque. Photograph of the author.
- Fig. 5.212:** German Fountain, view of decorative emblem on underside of dome. Photograph of the author.
- Fig. 5.213:** German Fountain, view of mosaic gilding and epigraphic ornament under dome. Photograph of the author.
- Fig. 5.214:** Unknown artist, comic depiction of the natural destruction of the German Fountain at the Hippodrome captioned "An example of evolution," printed in *Kalem*, December 3, 1908.
- Fig. 5.215:** Hejaz Railway commemorative column, Haifa. Photograph of the author.
- Fig. 5.216:** Raimondo D'Aronco, telegraph monument in Damascus, unrealized project in the form of an obelisk. Drawing from Manfredi Cicoletti, "D'Aronco e la Turchia," in *D'Aronco Architetto* (Milan: Electa, 1982), fig. 55.
- Fig. 5.217:** Postcard depicting Raimondo D'Aronco's telegraph monument in

Damascus, c. 1910. SALT Research AHDAM004.

- Fig. 5.218:** Raimondo d’Aronco, telegraph monument in Damascus, detail of the replica of Yıldız mosque on the column head. Drawing from from ‘İsmat Mastrük, “al-naşb al-tadhkārī l-il’-ittişālāt al-barkīyya bain Dimashq wa’l-Madina al-munawwara, Sāha al-shuhādā, Dimasqh,” diss. Eng., University of Damscus, 1992-93.
- Fig. 5.219:** Pascal Sebah & Policarpe Joaillier, view of the Yıldız mosque, c. 1910. LOC lot 9524, no. 4.
- Fig. 5.220:** Kütahya clock tower. Photograph of the author.
- Fig. 5.221:** Unknown, design for a clock tower to celebrate the beginning of the construction of the Hejaz Railway from *Malumat* 13 (1902). SALT Research AHDAM008.
- Fig. 5.222:** Unknown, Muzaffer Bey, agricultural monument, Konya (original 1916, Atatürk statue, designed by Heinrich Krippel, added October 1926), Konya, c. 1930. Wikimedia Commons.
- Fig. 5.223:** Unknown, view of the worker settlement at Belededik, c. 1912. Sammlung Irmengard Brand.
- Fig. 5.224:** Ruined barracks at Belededik. Photograph of the author.
- Fig. 5.225:** View of steel rail used as support for a ruined building at Belededik with the inscription “A.H.V. 1910” referencing the manufacturer – Altos Hornos de Vizcaya, a Spanish steel manufacturer – and the year in which it was produced. Photograph of the author.
- Fig. 5.226:** Taurus Mountains railway workers memorial. Photograph of the author.
- Fig. 5.227:** Unknown, bus drivers memorial, Çamalan, c. 1918. Courtesy Gunter Hartnagel.
- Fig. 5.228:** Unknown, German cemetery, Çamalan, c. 1918. Courtesy Gunter Hartnagel.
- Fig. 5.229:** Unknown, German cemetery, Belededik. Courtesy Gunter Hartnagel.
- Fig. 5.230:** Unknown, graves of Australian prisoners of war in the Christian cemetery at Belededik, Turkey. AWM P01645.002.
- Fig. 5.231:** Yıldız Palace, interior view of the Sedefli Salon (mother of pearl room), completed 1889. Photograph: Turgay Bülbül.

- Fig. 5.232:** Hereke, view from northwest, Kaiser Wilhelm II Kiosk. Photograph of the author.
- Fig. 5.233:** Interior view of the Hereke Kiosk, reception room (constructed 1898). TBMM Milli Saraylar.
- Fig. 5.234:** T. Baldasar, watercolor of the Kaiser Wilhelm pavilion at Hereke, c. 1900. Türkiye Büyük Millet Meclisi paintings collection, env. no. 52/1949.
- Fig. 5.235:** Unknown, imperial jacquard loom at Hereke, c. 1900. IRCICA photo archive 90453-10.
- Fig. 5.236:** Unknown, Hereke weaver seated at an outdoor loom, c. 1900. IRCICA photo archive 90453-32.
- Fig. 5.237:** Unknown, view of Auguste-Viktoria-Stiftung, Jerusalem, c. 1910. Wikimedia Commons
- Fig. 5.238:** Auguste-Viktoria-Stiftung, Jerusalem, interior view of the Church of the Ascension. Photograph: 2007 Tamarah, Wikimedia Commons.
- Fig. 5.239:** Cross of the Mount of Olives. Photograph: Robert Prummel.
- Fig. 5.240:** Auguste-Viktoria-Stiftung, main entry portal. Photograph: Ana al' Ain.
- Fig. 5.241:** Postcard depicting the Church of the Redeemer, Jerusalem. Wikimedia Commons.
- Fig. 5.242:** Gotthold Riegelmann, Auguste-Viktoria-Stiftung, bronze sculpture depicting of a crusader after Kaiser Wilhelm II in courtyard, Gotthold Riegelmann. Photograph: Ana al' Ain.
- Fig. 5.243:** Gotthold Riegelmann, Auguste-Viktoria-Stiftung, bronze sculpture depicting of Saint Elizabeth after Empress Victoria in courtyard, Gotthold Riegelmann. Photograph: Ana al' Ain.
- Fig. 5.244:** Unknown, Ekkehard and Uta in Naumburg cathedral (c. 1260) from Max Sauerlandt, *Deutsche Plastik des Mittelalters* (Düsseldorf and Leipzig: K.R. Langewiesche, 1909) fig. 65.
- Fig. 5.245:** Unknown, Saint Elisabeth holding up the Marburg cathedral, polychrome statue, c. 1470, Marburg. Photograph: Anne Seesholtz.
- Fig. 5.246:** Unknown (probably Gottlieb Schumacher), map of the German colony at Haifa, 1900. Ba R901/30186.

- Fig. 5.247:** Composite image of biblical excerpts inscribed above entries of homes in the German Colony, Haifa. Photographs of the author.
- Fig. 5.248:** Entryway and biblical inscription of Gottlieb Schumacher's house at the Germany Colony, Haifa. Photograph of the author.
- Fig. 5.249:** Unknown, German embassy at Taksim, between 1880 and 1893, Abdul Hamid II collection. LOC LOT 9516, no. 23.
- Fig. 5.250:** Pascal Sébah & Policarpe Joallier, view of the German consulate building in Taksim, c. 1906. DAII fotothek 9997 R 27.856. ©DAI.
- Fig. 5.251:** View the fountain donated to the German consulate in İstanbul on behalf of Sultan Abdülhamid II, 1906. Photograph: Ö. Kürklü.
- Fig. 5.252:** Plan of the German ambassador's residence at Tarabya, 1908. AK.
- Fig. 5.253:** Pascal Sebah & Policarpe Joaillier, view of the German ambassador's residence at Tarabya, sea façade, 1893. DAII fotothek. ©DAI.
- Fig. 5.254:** A hamam at the German ambassador's residence at Tarabya converted into a chapel, c. 1889. Photograph: Ö. Kürklü.
- Fig. 5.255:** Deutsche Orientbank, Sirkeci, street view. Photograph of the author.
- Fig. 5.256:** Deutsche Orientbank, Sirkeci, entryway detail. Photograph of the author.
- Fig. 5.257:** Deutsche Orientbank, Sirkeci, cupola detail. Photograph of the author.
- Fig. 5.258:** Deutsche Orientbank, Sirkeci, interior view. Photograph of the author.
- Fig. 5.259:** Deutsche Orientbank, Sirkeci, façade detail. Photograph of the author.
- Fig. 5.260:** Deutsche Orientbank, Sirkeci, façade detail. Photograph of the author.
- Fig. 5.261:** Postcard depicting the German Hospital, main building, in Beyoğlu, 1913-14. SALT Research.
- Fig. 5.262:** Postcard depicting the German Hospital, children's building, in Beyoğlu, 1913-14. SALT Research.
- Fig. 5.263:** Unknown, view of the German school at Yedikule. DAII R 26.343. ©DAI.
- Fig. 5.264:** Unknown, view of the German school at Beyoğlu. DAII 7044. ©DAI.

- Fig. 5.265:** Unknown, view of the German school at Taksim. DAI 7042. ©DAI.
- Fig. 5.266:** Unknown, view of a chemistry class at the German Girl's School, İstanbul. DAI 7018. ©DAI.
- Fig. 5.267:** Unknown, view of a *Turnen* class at the German Girl's School, İstanbul. DAI 7021. ©DAI.
- Fig. 5.268:** Konya station, workers' colony, view of a child's swing in the garden of an engineer's house. Photograph of the author.
- Fig. 5.269:** Philipp Holzmann GmbH, design for a minaret in ferroconcrete for the Vefa Kilise Mosque, c. 1912. ISg TA H 106.
- Fig. 5.270:** Alexander von Millingen (attributed), elevation of the Vefa Kilise mosque from Alexander von Millingen, *Byzantine Churches of Constantinople: Their History and Their Architecture* (London: Macmillan and Co., Ltd., 1912), 245.
- Fig. 5.271:** "A. Faranakhe" (attributed), view of the Vefa Kilise Mosque from Alexandros Geōrgiou Paspātēs, *Vyzantinai Meletai Topographikai kai Historikai Meta Pleistōn Eikonōn* (Kōnstantinoupolei: Ek Tou Typographeiou A. Koromēla, 1877), 353.
- Fig. 5.272:** Unknown, Heinrich August Meißner's house at Ma'an station. Photograph: Durham University.
- Fig. 5.273:** Interior view of the mosque fashioned from a rail car for the Hejaz Railway on the cover of *Servet-i Fünun* 534 [1908].
- Fig. 5.274:** Weiss, Frankfurt a.M, view of the third class passenger cars for the Hejaz railway, constructed by the Sueddeutsche Waggon-Fabrik A.G of Kelsterbach, c. 1910. BOA FTG 1962 001 001.
- Fig. 5.275:** View of the al Anbarya mosque. Photograph: Almiskeenah.
- Fig. 5.276:** Aerial view of the al Anbarya mosque. Photograph: Almiskeenah.
- Fig. 5.277:** Chemins de Fer Orientaux, section and plan of the Sirkeci-San Stefano rail line, c. 1888. OSa Kt.03 / IX C 38a / Nr.11.
- Fig. 5.278:** İzmit station, site plan with port, 1908. TCDD 10A-443.
- Fig. 5.279:** Reichskolonialamt, map of the roads bordering the terrain of the imperial railway (Windhoek), c.1901. Ba R1001/1208 K-1 fiche 1.

- Fig. 5.280:** Reichskolonialamt, development plan for Tsingtao Bay, 1898. Ba R1001/658 K-1, fiche 1.
- Fig. 5.281:** Deutsche-Ostafrikanische Gesellschaft, Ostafrikanische Gesellschaft, map showing the land appropriation of the Dar es Salaam-Morogoro Rail, c. 1903. Ba R1001/97 K-3, fiche 1.
- Fig. 5.282:** Unknown, artist's interpretation of Philipp Holzmann GmbH's construction of the railway in German East Africa (Tanzania), c. 1896. ISg W 1/2 278.
- Fig. 5.283:** Unknown, artist's interpretation of Philipp Holzmann GmbH's construction of the railway in German East Africa (Tanzania), c. 1896. ISg W 1/2 278.
- Fig. 5.284:** Unknown, view of German administration headquarters in Lomé, Togo, c. 1888. Harvard University Libraries Aga Khan Documentation Center.
- Fig. 5.285:** Unknown, Photo of Philipp Holzmann GmbH's main train station at Dar es Salaam, c. 1905. Harvard University Libraries Aga Khan Documentation Center.
- Fig. 5.286:** Map of Banja Luka, 1911. Wagner & Debes, Leipzig.
- Fig. 5.287:** Postcard depicting the Drum Carski (Kaiserstrasse), Banja Luka, c. 1880. Wikimedia Commons.
- Fig. 5.288:** Postcard depicting the Gospodska Ulica (Herrengasse), Banja Luka, c. 1880.
- Fig. 5.289:** Unknown, sketch of a plan for rail and port construction in Thessaloniki, c. 1898. Ba R901/1170.
- Fig. 5.290:** Map of Salonica harbor and railway terminus. Bibliothèque Nationale de France, department Cartes et plans, GE D-9938.
- Fig. 5.291:** Postcard depicting St. Stefano station, c. 1890. Wikimedia Commons.
- Fig. 5.292:** Postcard depicting Sirkeci station, İstanbul, 1896. Wikimedia Commons.
- Fig. 5.293:** Map of Ankara (detail), 1903. Wagner & Debes, Leipzig.
- Fig. 5.294:** Konya station, frontal view of the Baghdad Hotel. Photograph of the author.
- Fig. 5.295:** View of Ereğli station, c. 1926. Photograph: Chemins de Fer Antolies-

Bagdad. Harvard University Libraries Aga Khan Documentation Center.

- Fig. 5.296:** Guillaume Gustave Berggren, view of Ereğli train station and environs, c. 1906. DAI Fotothek. ©DAI.
- Fig. 5.297:** Guillaume Gustave Berggren, view of Ereğli train station and environs, c. 1906. DAI Fotothek. ©DAI.
- Fig. 5.298:** Exterior view, Özkoçlar Butik Otel, previously a villa belonging to a prosperous Armenian family, adjacent to the train station and off of the main boulevard of Ereğli with gas lamps in foreground. Photograph of the author.
- Fig. 5.299:** Guillaume Gustave Berggren, View of the Anatolian Railway, tunnel at Bekdemir (Pékdemir), c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.
- Fig. 5.300:** Postcard depicting the main street connecting the railway station to the port, İskenderun, c. 1914. Wikimedia Commons.
- Fig. 5.301:** Postcard depicting İskenderun station, c. 1914. Wikimedia Commons.
- Fig. 5.302:** Abd al-Hamid Zaki, fictional depiction of Kaiser Wilhelm arriving via train at Medina, 1910, offset lithograph in Arabic. British Museum 1948, 1214 series.
- Fig. 5.303:** Map of Jaffa and environs from an original survey by Thomas Samuel, 1912. Wagner & Debes, Leipzig.
- Fig. 5.304:** Unknown, likely Garabed Krikorian, view of Jaffa station, c. 1893. Edelstein Center, Hebrew University.
- Fig. 5.305:** Garabed Krikorian, view of Jaffa coastline and provisional rail construction, c. 1891. PEF P.2584.
- Fig. 5.306:** View of the Wieland family home and factory at the Jaffa (Tel Aviv) station. Photograph of the author
- Fig. 5.307:** Detail of the prefabricated concrete elements in the Wieland family home and factory at the Jaffa (Tel Aviv) station. Photograph of the author
- Fig. 5.308:** View of a house on the German Colony at Sarona using Wieland prefabricated elements. Photograph of the author.
- Fig. 5.309:** View of the shutter holders on the Wieland family home and factory at the Jaffa (Tel Aviv) station. Photograph of the author

- Fig. 5.310:** View of al ‘Ula station from adjacent garrison. Photograph: Matthew Sutherland.
- Fig. 5.311:** Map of Medina, detail of railway area, 1946. University of Texas Libraries.
- Fig. 5.312:** Map depicting the variety of track configurations in major Austrian and Hungarian cities, c. 1915. OSa Kt. 909.

INTRODUCTION

So act and draw out of your web of existence as much as is possible. Design your railways, cover the land we once inhabited with fertile fields, build factories, from revived activities... weave a gown behind which the past may disappear. That is all it desires.

—Friedrich Dernburg¹

[**Frontispieces I and II**]. Late in 1911, the acclaimed German archaeologist Theodor Wiegand (1864–1936) issued a little known text aimed at an atypical readership. Comprising a pithy yet playful eleven pages of instructions and issued as an “ex-officio” portable pamphlet, the text articulates its audience in bold at the outset: the gentlemen engineers of the Baghdad Railway.² The text, entitled *Instruktionen für geographische, topographische und archäologische Beobachtungen* (Instructions for Geographical, Topographical and Archaeological Observations), represented a diversion for the

¹ Friedrich Dernburg, *Auf deutscher Bahn in Kleinasien: Eine Herbstfahrt* (Berlin, 1892), 198–99. Also cited in Malte Fuhrmann, “Visions of Germany in Turkey: Legitimizing German Imperialist Penetration of the Ottoman Empire” (paper presented at the Graduate Conference in Central European Studies, Oxford: Oxford University, May 24–26, 2002). “So handelt und macht aus dieser Spanne Dasein, was Ihr daraus machen könnt. Ziehete Eure Eisenbahnen, bedeckt das Land wir einst bewohnten, mit fruchtbringenden Gefilden, baut Fabriken, webt aus neubelebter Thätigkeit auf allen Gebieten ein Gewand, hinter dem die Vergangenheit verschwinden darf. Sie begehrt ja nichts Besseres.”

² Theodor Wiegand [attributed], *Instruktionen für geographische, topographische und archäologische Beobachtungen* (Special printing, 1911), located in BA R8119F/81.15 F.2. I state that the pamphlet appears to be a revised edition of an earlier version produced in 1899 in light of a citation and figure in Axel Heimsoth, “Die Bagdadbahn und die Archäologie: Wirtschaftliche und wissenschaftliche Planungen im Osmanischen Reich,” in *Das große Spiel: Archäologie und Politik*, ed. Charlotte Trümpler (Cologne: Dumont, 2008), 362–63. Heimsoth mentions the 1899 version as having been authored by Gustav Hirschfeld, a classical archaeologist who led the excavations at Olympia between 1875 and 1877, with the title *An die Ingenieure der Bahnlinie Ismid–Eskischehir–Angora*, and he locates this pamphlet in the Staatsbibliothek zu Berlin (without a call number). It is rather unlikely that Hirschfeld was actually the author of this pamphlet, as he died in 1895, four years before this version was apparently issued. The library’s catalog contains no records of this item, which means either that there is a mistake in Heimsoth’s attribution or that the item is not searchable through the catalog. Heimsoth’s chapter is accompanied by an image of page 6 of the pamphlet, which covers Part III (Archaeology) and is nearly identical (with only small changes) to the 1911 version located in the Bundesarchiv. In his notes (369n10), Heimsoth cites a document in the DBHI (Document number P8115, 168–70) to which this one can be compared; it is dated November 1911 and is thus likely to be identical to Wiegand’s text.

venerable Wiegand, who was in that same year transitioning from his posts as director of the German state museum administration's operations in İstanbul and scientific attaché to the German Embassy there to the directorship of the Department of Antiquities, where he would oversee the early construction and planning stages of the Pergamon Museum.³ With the German involvement in the construction of the Ottoman railway network entering its fourth decade, Wiegand saw fit to modernize and further systematize a blueprint for how, exactly, German railway construction for the Ottoman empire could complicitly produce German knowledge of the Ottoman empire, knowledge that Wiegand saw as germane to the fields of geography, topography, and archaeology. Apart from the archaeological information, such knowledge would have no direct bearing on Wiegand's new role as museum director per se but it was most certainly important for the Wilhelmine geopolitical machine's *Orientpolitik* and ambiguous colonial ambition. In Wiegand's humble document, art, politics, and railway construction are intertwined and rendered mutually dependent. This triangulation is the subject of this dissertation.

Wiegand's text begins with romantic overtures. He reminds the Baghdad Railway engineers that it was a German engineer, Carl Humann (1839–1896), who discovered the great altar of Pergamon while surveying roads in İzmir province in the winter of 1864–

³ Recent insightful interpretations of the Pergamon Altar and Wiegand's role in its installation in Berlin have focused on the theme of mass spectacle and the paradigm shift it represented in German architectural culture. See Can Bilsel, *Antiquity on Display: Regimes of the Authentic in Berlin's Pergamon Museum* (Oxford: Oxford University Press, 2012), esp. 189–214; Suzanne Marchand, *Down From Olympus: Archaeology and Philhellenism in Germany, 1750–1970* (Princeton: Princeton University Press, 1996), 288–90; Alina Payne, "Portable Ruins: The Pergamon Altar, Heinrich Wölfflin, and German Art History at the Fin de Siècle," *Res: Anthropology and Aesthetics* 53–54 (Spring/Autumn, 2008): 168–89.

1865.⁴ He also reminds the engineers that it was a German engineer, Karl Sester (fl. 1875–1885), who discovered the great figures of Mount Nemrut while surveying roads in Adiyaman province in 1881.⁵ Wiegand stresses to the engineers that they too can take their place in the pantheon of German greats *if* they know what to look for while forging the “iron road” (*demiryol*) from Konya to the Persian Gulf.⁶

Wiegand, by no means a geographer, demonstrates a tacit affinity to the observation-based methods of Humboldt in his instructions for the collection of geographic data. “Every poke, every step, and every stroll,” Wiegand explains, “can result in scientific meaning.”⁷ He suggests that the engineers carry compasses, barometers, and sketchbooks in addition to their railway tools.⁸ Their written and measured observations should spare nothing of visual interest and should include the appearance of landforms, vegetation, cultivation, human settlements, and irrigation.⁹ Wiegand recommends sketching these sites with blue ink, using special drafting paper

⁴ Wiegand, *Instruktionen*, 3. Regarding Humann, see Eduard Schulte, *Carl Humann, der Entdecker des Weltwunders von Pergamon* (Münster: Ardey, 1971).

⁵ Wiegand, *Instruktionen*, 3. Regarding Sester, see Friedrich Karl Dörner, *Der Thron der Götter auf dem Nemrud Dag: Kommagene—das große archäologische Abenteuer in der östlichen Türkei*, vol. 3 (Bergisch Gladbach: Lübbe, 1987), 11–39.

⁶ Wiegand, *Instruktionen*, 3. “Schon die für den Bahnbau erforderlichen Aufnahmen der neuen Linien in großem Maßstab darf für einen erheblichen Gewinn gelten. Mit einiger weiterer Initiative können aber die Herren Ingenieure Erfolge erzielen, welche bei einem derartigen Unternehmen noch niemals ins Auge gefaßt worden sind und diesem wie allen einzelnen Beteiligten einen dauernden Ehrennamen in der Wissenschaft sichern würden.” (Even the recording required for the construction of new lines may result in a large-scale profit. With some further initiative, the gentlemen engineers may achieve success unprecedented for such a company, one that would ensure for all participants a permanent and honorary name in science.)

⁷ Ibid.

⁸ Ibid., 4.

⁹ Ibid.

and a uniform scale related to the pace of walking when more exact measurements are not possible.¹⁰ Wiegand advocates carrying a tripod and suggests approaching and inspecting sites of interest from all angles. He prescribes aneroid barometers for atmospheric measurements and encourages the men of the Baghdad Railway to collect fossils and break them in the palms of their hands to test the geological structure of the earth.¹¹

With regard to topography and archaeology, Wiegand stresses the historical context of antiquity.¹² Topography, he suggests, is the study of antique roads, networks, and settled earth, while archaeology is the study of constructed monuments. Again, Wiegand stresses the importance of immersive observation and patience, noting that it is not possible on the first or second examination of a site or monument to truly understand it.¹³ Wiegand notes the importance of engendering the help of natives, which can be accomplished with *baksheesh* (“Trinkgeld”), to become more intimate with the sites.¹⁴ Wiegand advises that it is important not to overemphasize the importance of stones and ruins, as natives who need remain unaware of their value, simply describe these items as

¹⁰ Ibid.

¹¹ Ibid., 4–5.

¹² Ibid., 5

¹³ Ibid., 6.

¹⁴ Ibid. “Da dies schon häufig zum Zerschlagen der Steine geführt hat, so tut man gut, den Leuten in behaglicher Unterhaltung solchen Glauben allmählich zu nehmen und ihnen klar zu machen, daß die Sache ganz harmlos, ganz ohne Hintergedanken sei, auch ein kleines Trinkgeld in Aussicht zu stellen für alles, was sie zeigen werden.” (Since this has often led to the breaking of stones, it is best to appear comfortable while in conversation with others and to gradually convey that the [stones] are without great significance, and that there are no ulterior motives, which can be signified through a small tip in exchange for information and assistance.)

“eski” (old), “djenevîs” (Genoese), or “ören” (ruins).¹⁵ Suggesting that the value of these stones would effectively imperil them, Wiegand discourages the engineers from thinking artfully: their drawings, he notes, should be “more accurate than beautiful.”¹⁶

Wiegand underscores these general guidelines as a prelude to a technical protocol for the observation and documentation of topographic and archaeological sites of interest. In regard to topography, he alerts the Baghdad Railway’s engineers to the cylindrical mile markers of antique roads and artificial burial mounds and describes how to draw them in plan, how to photograph them, and how to describe them.¹⁷ In regard to archaeology, Wiegand distinguishes for the engineers, without a superfluous word, the difference between a sculpture (“eski sürét,” “eski mermér”), an inscription (“Yasily tasch”), and *Kleinkunst* (small art), each with its respective subdivisions and methods of documentation.¹⁸

Wiegand alerts the engineers to the fact that even extant sites that are known and/or in use—hans, mosques, bazaars, Byzantine churches and church ruins, etc.—are

¹⁵ Ibid., 6–7. “Man greife dies aber nicht hoch und gehe auch auf keine hohe Forderung ein, wie sie wohl bisweilen gestellt wird, weil dadurch der Glaube an besondere Kräfte der Antike wieder genährt wird.... Selbstverständlich fehlt den Bewohnern jede Unterscheidung für das höhere oder geringere Alter und die Bedeutung der Reste: alles vom Altertum bis zum verfallenen türkischen Bau ist ihnen eski – alt, djenevîs – genuesisch, oeren – Ruine.” (One need not esteem [these items] too highly or convey a sense of great demand, as it is often advantageous that faith is nourished by the special forces of the ancient world... Lacking any distinction or importance for the inhabitants of the higher or lower ages, these groups of people express [everything] from antiquity to the dilapidated Turkish building as “eski”—old, “djenevîs”—Genoese, or “oeren”—ruin.)

¹⁶ Ibid., 7. “Endlich sei ein für allemal gesagt, daß eine Berichterstattung um so wertvoller ist, je sachlicher sie ist, es kommt nichts auf deuten an. Ebenso seien die Zeichnungen eher genau als schön.” (Finally, it is certainly true that a report is all the more valuable the more objective it is, when there is nothing to guess. Similarly, the drawings [should be] more accurate than beautiful.)

¹⁷ Ibid., 7–8.

¹⁸ Ibid., 8–12.

still not properly understood and would benefit from documentation.¹⁹ Finally, Wiegand concludes his text with a statement that is at once cautionary and hopeful:

The fact that we recommend that workers of their own line take part in the care and treatment of ancient remains that appear or are touched through their work is for self-evident reasons: already, acts of barbarism have happened where valuable ancient ruins have been at least partially destroyed for the construction of railway buildings. Regarding the Baghdad Railway, [it is possible to] give back to the widest circles of the educated if you engineers will show how such a large company, without prejudice, can provide significant services to the truest purpose of science. Each individual may be assured that he shall receive his fair share and that his name will pass on to the public... For this he may also [receive] special allowances.²⁰

Wiegand's pamphlet and its scientific divisions of geography, topography, and archaeology have inspired the structure of this dissertation. To these categories two additional ones—politics and architecture and urbanism—have been added to Wiegand's three, to compose a study that addresses five distinct aspects of the German construction of the Ottoman railway network and the knowledge it sought to produce—and did.

¹⁹ Ibid., 12. "Anhangsweise sei bemerkt, daß weder die byzantinische noch die islamitische Baukunst Kleinasien, Syriens und des Euphrat-Tigrisgebietes auch nur einigermaßen genügend durchforscht ist. Genaue Aufnahmen von byzantinischen Kirchen und Kirchenruinen sowie von orientalischen Chans, Moscheen, Bazarren usw können daher von großem Wert sein und ihren Urhebern viel Ehre eintragen." (In an appended manner it should be noted that neither the Byzantine nor the Islamic architecture of Asia Minor, Syria, and the Euphrates and Tigris basins are sufficiently explored. Accurate recordings of Byzantine churches and ruins of Oriental hans, bazaars, mosques, etc. can therefore be of great value and place their recorders in much honor.)

²⁰ Ibid., 12–13. "Daß den Arbeitern der eigenen Linie Vorsicht in der Behandlung antiker Reste empfohlen wird, die bei der Arbeit auftauchen oder berührt werden, gilt als selbstverständlich; es ist freilich auch schon die Barbarei vorgekommen, daß wertvolle antike Ruinen für Bahnbauten zum Teil zerstört worden sind. Bezüglich der Bagdadbahn geben sich die weitesten Kreise der Gebildeten der Hoffnung hin, daß ihre Ingenieure zeigen werden, wie ein derartig großes Unternehmen, unbeschadet seinem eigentlichsten Zweck, der Wissenschaft erhebliche Dienste leisten kann. Jeder einzelne möge versichert sein, daß sein Anteil mit seinem Namen der Öffentlichkeit übergeben wird, worüber ihm seinerzeit die Belege, etc. auch Sonderabzüge zugehen sollen." This is followed by a bibliography of six "recommended materials," cited in the document as: "G. Neumayer, *Anleitung zu wissenschaftlichen Beobachtungen auf Reisen* (Hannover, Jänicke); D. Kaltbrunner, *Der Beobachter; allgemeine Anleitung zu Beobachtungen über Land und Leute* (Zürich, Wurster & Co.); Fr. Kaulen, *Assyrien und Babylonien nach den neuesten Entdeckungen* (Freiburg, Herder); Anton Springer, *Handbuch der Kunstgeschichte, Band I* (Leipzig, Seemann); A. Michaelis, *Die archäologischen Entdeckungen des 19. Jahrhunderts* (Leipzig, Seemann); G. F. Hertzberg, *Geschichte der Byzantiner und des osmanischen Reiches* (Berlin, Baumgärtel)."

Chapter One sets the German construction of the Ottoman railway network in political and historical context, including other extraimperial interventions in Ottoman lands—namely, those of the British and the French—as well as German railway endeavors elsewhere, such as in the German colonies of Africa. The chapter develops an operative and materialist lens through which to understand the railway in its geopolitical context, and it introduces a diverse range of political figures, engineers, architects, laborers, journalists, and travelers who encountered the railway in one way or another.

Chapter Two, which takes Wiegand’s notion of geography as its starting point, analyzes a half century of geographic knowledge—ranging from cultural geography to geology—that developed in tandem with the German construction of the railways. The analysis examines the ways in which cultural incursion was something that occurred largely under the auspices of “disinterested” science and notions of diffusionism originating from the Leipzig school of geography. Critical to this chapter are an array of visual and textual documents which chronicle the desire to expand German *Wissenschaft* of the most relevant parts of the Ottoman empire and to represent them for a wider audience.

Chapter Three analyzes Wiegand’s notion of topography—a contoured surface of networks, nodes, and thoroughfares—as a form of knowledge unique to the construction of rail. The analysis demonstrates how, as early as the seventeenth century, German-led expeditions in and travelogues of the lands of Anatolia and Arabia provided template routes and a spatial knowledge of population centers that proved instrumental for designing the trace of the railways, one building upon the next. The chapter examines the amalgamation of German influence over those locations through the remarkably

multifaceted role that German orientalist, archaeologists, and railway engineers played in establishing the Ottoman empire as a known topography onto which they could graft a network of ambition.

Chapter Four considers archaeology and looks at several key episodes – Gordium, Tell Halaf, Mshatta, Sam'al, and Samarra – of archaeological activities where the construction of the rail played an allied role, not least in supplying Berlin with an archaeological canon that alluded to and fabricated affinities between the two empires. This chapter also illuminates how the German incursion into the Ottoman landscape's archaeological wealth through railway design and construction marked a turning in which the earth, itself, was reconstructed as a cultural entity.

Chapter Five outlines the myriad architectural aspects of the railway's construction and the ways in which it revealed atypical morphological relationships through built form, manifested not only in stations but also in barracks, commemorative monuments, hospitals, bridges, tunnels, urban plans, and numerous other related aspects of the built environment. This chapter, the dissertation's most extensive, seeks to capitalize on the ambiguous colonial nature of German "expertise" in the architecture, engineering, and urbanism of the late Ottoman empire and to situate it as a variegated and occasionally dialogic model of European cultural expansionism expressed through the conditions of a concept identified here as ambiguous transmutation.

This study is the first to synthesize into a single unit all four of the discrete railway lines in the Ottoman empire with which German parties were involved— either integrally, as with the Anatolian Railways and the Baghdad Railway, or more collaterally, as with the railways of European Turkey and the Hejaz Railway and its

Palestinian tributaries. The intention in this synthesis is to highlight the similarities as well as the differences among these lines and to contextualize them within a greater era that is coterminous with the Eric Hobsbawm's "Age of Empire" (1875–1914), a period of German ascendancy on the global stage as much as it was a time of "inevitable" Ottoman unraveling.²¹ To date, there is no critical in-depth treatment, and certainly not one that is specifically aesthetic, of material related to the German production of rail in the Ottoman empire. This study addresses this gap through the consideration of a broad range of objects and places made through these five fields of knowledge.

Historical accounts and interpretations of the railways' economic and political significance are more common, although they too remain monographically parceled between the various individual railways. A comprehensive source on the earliest railway network, the so-called *Chemin de Fer Orientaux*—of which the main German aspects were its financiers and engineers—is Vahdettin Engin's *Rumeli Demiryolları*, which provides a basic account of the economic and political story (and partial failure) of the railways comprising that network through primarily Turkish sources.²²

²¹ As outlined in Eric Hobsbawm, *The Age of Empire: 1875–1914* (New York: Vintage Books, 1987): "The central axis round which I have tried to organize history of the century is the triumph and transformation of capitalism in the historically specific forms of bourgeois society in its liberal version. The history begins with the decisive double breakthrough of the first industrial revolution in Britain, which established the limitless capacity of the productive system pioneered by capitalism for economic growth and global penetration, and the Franco-American political revolution which established the leading models of the public institutions of bourgeois society supplemented by the virtually simultaneous emergence of its most characteristic—and linked—theoretical systems: classical political economy and utilitarian philosophy" (8–9). By "inevitable" I refer to the concept specifically as it applies to Ottoman "westernization," as thoughtfully introduced by Shirine Hamadeh in "Ottoman Expressions of Early Modernity and the 'Inevitable' Question of Westernization," *Journal of the Society of Architectural Historians* 63, no. 1 (March 2004): 32–51. Hamadeh begins her analysis with the construction of the Neşatabad palace on the Bosphorus by the German architect Antoine Ignace Melling at the end of the eighteenth century.

²² Vahdettin Engin, *Rumeli Demiryolları* (İstanbul: Eren, 1993).

The majority of the publications that consider the Anatolian Railways extending eastward from İzmit to Konya and Ankara and later comprising the link westward to İstanbul essentially treat these as precursors to the Baghdad Railway (extending from Konya eastwards), a combination that makes sense given the continuity of their personnel and their geographic contiguity. The Baghdad Railway has a quasi-mythical status in modern German culture, in particular, as evinced by a sizable list of both scholarly and nonscholarly publications. Jonathan McMurray's *Distant Ties: Germany, the Ottoman empire, and the Construction of the Baghdad Railway* (2001) is the historical study most exclusively focused on the construction aspects of the Ottoman railways, covering the Anatolian and Baghdad Railways in particular.²³ McMurray's work has served as a valuable portal to further sources, although it has also been fairly criticized for its myopic focus on exclusively German language sources.²⁴ The title of a book by Sean McMeekin, *The Berlin-Baghdad Express: The Ottoman empire and Germany's Bid for World Power* (2010) is misleading as the book spends only a few pages discussing the railway and concentrates instead on German *Orientpolitik* in the run-up to World War I.²⁵ Ignaz Civelli's *Deutsche Schienen in osmanischem Boden: Eine virtuelle Reise mit der Anatolischen und Bagdadbahn durch Geschichte, Wahrnehmungen, Raum und Zeit*

²³ Jonathan McMurray, *Distant Ties: Germany, the Ottoman Empire, and the Construction of the Baghdad Railway* (Westport, CT: Praeger, 2001).

²⁴ See Yakup Bektaş, "Review: *Distant Ties, the Ottoman Empire, and the Construction of the Baghdad Railway* by Jonathan S. McMurray," *Technology and Culture* 45, no. 4 (October 2004): 872–74.

²⁵ Sean McMeekin, *The Berlin-Baghdad Express* (Cambridge, MA: Harvard University Press, 2010).

(2010) and Murat Özyüksel's *Osmanlı-Alman ilişkilerinin gelişim sürecinde Anadolu ve Bağdat Demiryolları* (1998) add some new interpretations of similar sources.²⁶

Nonscholarly sources, such as Jürgen Lodemann and Manfred Pohl's *Die Bagdadbahn: Geschichte und Gegenwart einer berühmten Eisenbahnlinie* (1989), Manfred Pohl's *Von Stambul nach Bagdad: Die Geschichte einer berühmten Eisenbahn* (1999), and particularly Peter Heigl's *Schotter für die Wüste: Die Bagdadbahn und ihre deutschen Bauingenieure* (2004) are notable for unearthing previously unpublished photographs, the lattermost partially containing images originating from the private collections of descendants of the railway workers.²⁷ Baghdad Railway enthusiasts, most prominently Gunter Hartnagel, have done some impressive amateur sleuthing of postcards and other ephemera and have, to the benefit of this study, published some of these materials online and shared yet more with the author over the course of several years of correspondence.²⁸

The political history of the Hejaz Railway and some of its cultural aspects are synthesized in Murat Özyüksel's 2000 publication *Hicaz Demiryolu*, which builds upon

²⁶ Ignaz Civelli, *Deutsche Schienen in osmanischem Boden: Eine virtuelle Reise mit der Anatolischen und Bagdadbahn durch Geschichte, Wahrnehmungen, Raum und Zeit* (Munich: GRIN Verlag, 2010); Murat Özyüksel, *Osmanlı-Alman ilişkilerinin gelişim sürecinde Anadolu ve Bağdat Demiryolları* (İstanbul: Arba, 1988).

²⁷ Jürgen Lodemann, Manfred Pohl, *Die Bagdadbahn: Geschichte und Gegenwart einer berühmten Eisenbahnlinie* (Mainz, Germany: Hase & Koehler, 1989); Manfred Pohl, *Von Stambul nach Bagdad: Die Geschichte einer berühmten Eisenbahn* (Frankfurt am Main: Piper, 1999); Peter Heigl, *Schotter für die Wüste: Die Bagdadbahn und ihre deutschen Bauingenieure* (Nuremberg: P. Heigl, 2004)

²⁸ See Hartnagel's images at <http://www.flickr.com/photos/39631091@N03/>, accessed October 30, 2013.

the work of William Ochsenwald's *The Hijaz Railroad*, written two decades prior.²⁹ Both cover detailed aspects of the railway's construction from a logistical perspective in distinct chapters. Ufuk Gülsoy's *Hicaz Demiryolu* (1994) is notable as the most extensive utilization of Ottoman records, which are presented as a compilation of data with minimal interpretation.³⁰ Sayyid Muhammad Diqin's *Sikkah Hadid al-Hijaz al-Hamidiyyah: Dirasah Watha'iqiyyah* (1985) stresses the religious aspects of the railway's construction, while James Nicholson's *The Hejaz Railway* (2005) is useful for its rich array of images and synoptic compilation of previous sources.³¹ Ulrich Fiedler's *Der Bedeutungswandel der Hedschasbahn: Eine historisch-geographische Untersuchung* (1984) focuses on continental European sources for the political history of the railway, while M. Metin Hülögü's *The Hejaz Railway: The Construction of a New Hope* (2011) studies the railway's logistics through the prism of British sources.³²

The political and economic history of the Hejaz Railway's Palestinian tributaries is rounded out by three publications: Jünī Mansur's *Al-Khatt al-Hadīdī al-Hijāzī: Tārīkh wa-tatawwur qitār Dar'ā-Hayfā* (2008), Paul Cotterell's *The Railways of Palestine and Israel* (1986), and Anthony Travis's *On Chariots with Horses of Fire and Iron: The*

²⁹ Murat Özyüksel, *Hicaz Demiryolu* (İstanbul: Türkiye Ekonomik ve Toplumsal Tarih Vakfı, 2000); William Ochsenwald, *The Hijaz Railroad* (Charlottesville: University Press of Virginia, 1980).

³⁰ Ufuk Gülsoy, *Hicaz Demiryolu* (İstanbul: Eren, 1994).

³¹ Sayyid Muhammad Diqin, *Sikkah Hadid al-Hijaz al-Hamidiyyah: Dirasah Watha'iqiyyah* (Cairo: Matba'ah al-Jabalawi, 1985); James Nicholson, *The Hejaz Railway* (London: Stacey International, 2005).

³² Ulrich Fiedler, *Der Bedeutungswandel der Hedschasbahn: Eine historisch-geographische Untersuchung* (Berlin: Klaus Schwarz, 1984); M. Metin Hülögü, *The Hejaz Railway: The Construction of a New Hope* (Clifton, NJ: Blue Dome, 2011).

Excursionists and the Narrow Gauge Railroad from Jaffa to Jerusalem (2009).³³

Mansur's study focuses on the Daraa-Haifa branch and comprises archival work from Israel and Jordan, which is augmented by both Travis's and Cotterell's utilization of European sources and generous illustrations.

This study coalesces this literature and builds upon it through an expansive reevaluation of archival and primary sources originating, in rough order of frequency, from Germany, Turkey, Austria, the United Kingdom, Israel and the Palestinian Territories, the United States, Italy and France. Many of these sources have not previously been studied in the cultural context of the construction of the Ottoman railway network, and even more have not been studied at all. This work is augmented by fieldwork and on-site analyses of a large number of the sites that were accessible at the time of research. Despite the tremendous, wide-ranging alteration of the Ottoman built environment, the four lines studied here have hitherto been neglected as the subjects of sustained critical visual and spatial analyses. Images have typically accompanied the literature only in an ancillary fashion and have not been analyzed for the wealth of information they contain. This study does not reject the hermeneutic context, but it does seek to use the object and the image as original rather than representational source material, a process which gives context and justification to the considerable amount of imagery (624 figures) used in this study.

³³ Jūnī Mansur, *Al-Khatt al-Hadīdī al-Hijāzī: Tārīkh wa-tatawwur qitār Dar'ā-Hayfā* (al-Quds: Mu'assasat al-Dirāsāt al-Maqdisīyah, 2008); Paul Cotterell, *The Railways of Palestine and Israel* (Abingdon: Tourret, 1986); Anthony Travis, *On Chariots with Horses of Fire and Iron: The Excursionists and the Narrow Gauge Railroad from Jaffa to Jerusalem* (Jerusalem: Magnes University Press, Hebrew University of Jerusalem, 2009).

While this dissertation subdivides its material into the five topical categories inspired by Wiegand's 1911 pamphlet, it is unified by a set of historiographic and conceptual concerns that accompanied this investigation from the beginning and that bear mentioning. Although these concerns overlap and cross-pollinate, it is possible to divide their subject matter into roughly four components: geopolitics, infrastructure, multiculturalism, and expertise.

The original meaning of the term "geopolitics" in the late nineteenth and early twentieth centuries has been dramatically recast from being operative and discursive to becoming essentially theoretical, and the term has become too multifunctional and diffuse to carry much meaning today. This study uses "geopolitical" to describe historical discursive contexts synchronic with the railways' construction and specific to the German circles of statecraft from which both geopolitics and the Ottoman railway construction emerged.

A brief summary of what is meant by this discursive geopolitics is in order. In the wake of Alexander von Humboldt's pioneering work on the natural world, the discipline of geography expanded greatly, furnishing new sub- and paradisciplines that included cultural geography, social geography, and—of interest here—geopolitics, the term being a conjugation of "geography" and "politics" in German as it is in English.³⁴ Although the

³⁴ Geography as an academic discipline is largely a product of post-Enlightenment Germany, particularly the writings of Alexander von Humboldt, whose work remained foundational for the study of geography in Europe into the twentieth century. The discipline took an even stronger hold in Britain, perhaps as part of that country's ambitious colonial program. Many of the earliest German geographers, Humboldt included, developed the discipline using elements of Kantian spatial thinking, which linked geography to philosophy from the outset and gave it a unique place within the larger field of science, often appearing to be equally linked to the humanities as to the hard physical sciences. However, geography and cartography were also entirely codependent, and considered in the *longue durée*, the cartography of the explorers and mapmakers of the Middle Ages and the early modern period furnish a more diverse narrative for the origins of geography.

definitive intellectual origins of the term are debated, historians generally agree that the first protagonist was Friedrich Ratzel,³⁵ a leading German geographer based at the University of Leipzig who headed the influential Institute for Regional Geography. Ratzel is most remembered for two important publications, *Politische Geographie* (*Political Geography*), published in 1897, and *Der Lebensraum* (*The Living Space*), published in 1901. Central to *Der Lebensraum* is Ratzel's conception of *Der Staat als Organismus* (the state as organism). This theory came to be synonymous with the more widely established "organic theory of the state," which conceptualized the polity as a natural (as opposed to mechanical) phenomenon and prompted the rethinking of borders as mutable fixtures akin to the membranes of cells.³⁶

The concept of the state as organism is relevant to this study on two levels. First, it establishes the common biological analogies of connective networks (i.e. circulatory systems, nodal systems, etc.) such as the rail as part and parcel of the German state's sense of identity. Second, and more specifically, the concept has often been cited as a way in which the German state strategized its power as one that was land-based and predicated its organic, contiguous sense of its own political body. After the Dual Alliance of 1879 with Austria-Hungary, a land-based suprapower stretching from Hamburg to the Persian Gulf was entirely realizable with Ottoman cooperation/coercion, and could

The supremacy of Islamic cartography in the Middle Ages, for example, greatly influenced European mapmaking, and thus the field of geography cannot accurately be seen as entirely a product of Europe's enlightened awakening in the eighteenth century.

³⁵ There is a growing amount of literature on the origins of geopolitics that highlight the singular importance of Ratzel. See Gearoid O'Tuathail, *Critical Geopolitics: The Politics of Writing Global Space* (Minneapolis: University of Minnesota Press, 1996) and Simon Dalby, *Rethinking Geopolitics* (New York: Routledge, 1998).

³⁶ Friedrich Ratzel, "Der Staat als Organismus," *Die Grenzboten* 5, no. 52 (1896), 614–23.

effectively build a land “wall” that blocked the powers on either side. This stood in inherent contradistinction to the maritime priorities of France and Britain and the consonant colonial power structures they spurred.

While debates on architectural style may have persisted well into the twentieth century, the very intellectual emancipation those debates fostered—to be sure, a product of the Enlightenment—can be said to have made itself manifest *beneath* or *within* a given stylistic or technological mode, and so the history of architecture and urbanism in the nineteenth and early twentieth centuries may also be evinced by that which is not meant to be looked at as form per se. This suggestion of an expanded field of observation—of steel and glass, of train tracks and sewage systems, of prefabrication and assembly lines—is anathema to the optical epistemological imperatives of the picturesque and the sublime propagated by the century’s major theorists and its major historians since. To the extent that the lack of critical consideration of infrastructure can be called a blind spot in the history of architecture and material culture may have something to do with problems of universal subjecthood and its relationship to the cultural landscape above and beyond the nation or Europe. Propositions of the sublime, the picturesque, and their permutations propose capacities undifferentiated between men and women, children and adults, and, one would presume, cultures, to create, apprehend, and comprehend the built environment.

Nothing is more symbolic of this new environment than the railway, the greatest infrastructural accomplishment of the nineteenth century. The heroic railways of the era—the Trans-Siberian and American railways—functioned essentially as consolidators of national or imperial sovereignty and identity, and studies tend to suggest that this

consolidation and infrastructure brought with it an attendant and discernible national visual program. Because the German-Ottoman rail program was, broadly characterized, a partnership, and because it was iterative and relatively slow in its gestation, it has not been considered through the same aesthetic prism. Indeed, to do so would mean negotiating a truly ambiguous relationship with competing and shifting objectives. However, this does not mean that visual programs did not exist or were devoid of symbolism. This study considers the ambiguous nature of the German-Ottoman railway partnership as its fundamentally unique quality and the source, particularly in architecture, of a process of ambiguous transmutation, outlined in Chapter Five. Describing and codifying the process of ambiguous transmutation is part of a broader interest in discerning and developing ways to understand infrastructure that is created above and beyond imperial or national borders as a visual program unto itself, a timely concern in our era of globalization and transnational professional practice. This approach downplays the characteristic primacy that architectural history places on authorship and that political history places on nationhood. This study attempts to eschew these tendencies in privileging geopolitical context above and beyond the rubrics of nationhood and style.

Conceiving a supranational entity such as the German-built Ottoman railway network in visual terms requires new methods of description and conceptual paradigms. “Multiculturalism,” a term whose potency has atrophied in recent decades, is worth reconsidering for this purpose. The term has come to be a descriptor of the solely affirmative qualities of a diversity of ethnic, racial, and religious groups within a social and political unit. This is a departure from earlier uses of the term, which tended to

concern themselves with the inherent complexities of cultural multivalency writ large. Thinkers such as Jürgen Habermas and Kwame Anthony Appiah have considered the character of multicultural societies from this standpoint, which rids the term of its moral value in favor of analyses of its operative processes.³⁷ Elemental to this understanding of multiculturalism are the myriad historical contexts in which knowledge and emancipation have been conceived in culturally pluralistic political bodies. In the cases of both the newly unified German empire, forged from a constellation of duchies, diets, and microstates, and the Ottoman empire, with its longstanding and constituent multicultural organization, there is some unexpected multiculturalist synergy.

The framework in which this multiculturalist synergy actually produces *things* is different than the conventional power/knowledge relationship produced through Orientalism as famously described by Edward Said. Orientalism dialectically intermingled both within and outside of the German-Ottoman engagement, and it is important to remember that Said himself thought of German orientalism as a second-order entity. Said's characterization, while vastly overstated, bears note:

The German Orient was exclusively a scholarly, or at least a classical Orient: it was made the subject of lyrics, fantasies, and even novels, but it was never actual, the way Egypt and Syria were actual for Chateaubriand, Lane, Lamartine, Burton, Disraeli or Nerval. There is some significance in the fact that the two most renowned German works on the Orient, Goethe's *Westöstlicher Diwan* and Friedrich Schlegel's *Über die Sprache und Weisheit der Indier*, were based respectively on a Rhine journey and on hours spent in Paris libraries. What German Oriental scholarship did was to redefine and elaborate techniques whose application was to texts, myths, ideas, and languages almost literally gathered from the Orient by imperial Britain and France.³⁸

³⁷ See, for example, Jürgen Habermas, "Struggles for Recognition in the Democratic Constitutional State," in *Multiculturalism: Examining the Politics of Recognition*, ed. Charles Taylor (Princeton: Princeton University Press, 1994), 107–48; Kwame Anthony Appiah, "Identity, Authenticity, Survival: Multicultural Societies and Social Reproduction," in *Multiculturalism*, ed. Charles Taylor, 149–64.

³⁸ Edward Said, *Orientalism* (New York: Penguin, 1979), 24.

Similarities are, nonetheless, also plainly evident: “What German Orientalism had in common with Anglo-French and later American Orientalism was a kind of intellectual authority over the Orient within Western culture.”³⁹

What Said describes as “authority” is, this study argues, a prefiguration of a concept of expertise, the application of scientific (not in the humanist sense) knowledge toward a pragmatic or real-world end, typically political and economic in nature.⁴⁰ In a letter written to the editor of the *New York Times* in 1853, Karl Marx (1818–1883) summed up how this functioned specifically between Germany and its most important interlocutor in the Orient:

It is true that during the last thirty years much has been done toward general enlightenment concerning the state of Turkey. German philologists and critics have made us acquainted with its history and literature... But the diplomatic wiseacres seem to scorn all this, and to cling as obstinately as possible to the traditions engendered by Eastern fairy-tales.⁴¹

Marx alludes to the incommensurability of German Orientalism as a study and its actual application to the Ottoman empire. The German construction of the Ottoman railways, which occurred in the wake of Marx’s statement, single-handedly engendered a new commensurability between orientalist knowledge and real-world practice and showcased “expertise” as the bridge between German knowledge of the Orient and its late engagement with it.

In her book *German Orientalism in The Age of Empire: Religion, Race, and Scholarship*, Suzanne Marchand suggests that German-speaking Central Europeans

³⁹ Ibid.

⁴⁰ Ibid., 226.

⁴¹ Karl Marx, *The Eastern Question: Letters written 1853–1856 Dealing with the Events of the Crimean War* (New York: Augustus M. Kelley, 1969 [original 1897]), 22.

conjured a counterdistinctive “Orient” premised on a longing to understand the Near East as a corollary to the longing to understand the New Testament, biblical lands, and in turn, the history of their own Christianity.⁴² Marchand’s thesis is incredibly convincing, not least for the broad range of bona fide orientalist she studies with rigor and aplomb. But it is also important to note that it would be only the expert men of letters, not professionalized experts such as railway engineers or architect-bureaucrats, who would have this humanistic preoccupation. The delivery to the Ottoman empire of German expertise in rail construction was not an orientalist endeavor per se, but it did draw upon myriad earlier forms of orientalist knowledge and at the same time provided a pragmatic cause for the acceleration of its production. Marchand contends that German orientalism laid the foundations for multicultural thinking but was unable to develop it.⁴³ This dissertation suggests that this thesis overlooks the impact of orientalist knowledge on professionals (as opposed to academics) and the significant effects of pragmatic professional forms of multicultural engagement—evident across the range of knowledge produced in tandem with the German construction of the Ottoman railway network—on truly actualizing and defining markedly un-self-conscious modes of multicultural logic with which we still live.

A common refrain of students of the long nineteenth century is that intellectually and materially, it was a period of self-reflexive revivals that lack a common denominator, and so they find the stylistic *-isms* of its cultural production, in German culture as elsewhere, emblematic of a crisis of existential identity and protomodernist thought. The

⁴² Suzanne Marchand, *German Orientalism in the Age of Empire: Religion, Race, and Scholarship* (New York: Cambridge University Press, 2009), 1.

⁴³ *Ibid.*, 495–99.

extent to which this is both true and particularly evident in the built environment belies the projective nature of the technological and industrial culture in which it was produced. Limiting architectural history of the long nineteenth century to a Wöhlflinesque decomposition of styles undermines a century characterized, to a great extent in the “Western” world and to varying degrees elsewhere, by an intellectual emancipation that untethered thinkers and common folk alike from cultural positivism and gave unprecedented importance to the value of plurality and, more importantly, the value of a human life and its right to access expertise in its spatial and technological guises. This dissertation will present five of those guises—politics, geography, topography, archaeology, and architecture and urbanism—from a material and object-based point of view and will give hue to the critical and multicultural capacities of that expertise, all the while rendering it consonant with its formidable geopolitical substrate.

CHAPTER 1: POLITICS

Tout le monde ici demande une concession, l'un demande une banque, l'autre une route. Çe finira mal— banque et route—banqueroute.¹

—attributed to Grand Vizier of the Ottoman empire, Mehmed Fuad Pasha, 1866.

1.1 On History

The failed Ottoman sieges of Vienna, first in 1529 [Fig. 1.1] and again in 1682–83, are two of but a handful of political and military events that have come to emblemize the world-historical civilizational confrontation that pits a “West” and an “East,” an “Orient” and an “Occident,” directly against one another. Like the Battle of Tours before, the bloody yet successful defense of the heart of Europe from a Muslim incursion furnishes the historiographic leitmotif with which the historian may affirm numerous familiar stereotypes of Occidental “progress,” on the one hand, and Oriental “decline,” on the other. Arnold Toynbee underscores the geographical stakes when he notes that Vienna lies more than halfway between Constantinople and the Straits of Dover.²

But how exactly does this binary function in the modern era? We can certainly take these battles and their subsequent aftermaths at face value—as harbingers of a paradigmatic global power shift that left Europe firmly in charge of the world stage from the eighteenth century onward. But even so, we have not yet fully understood the ways in which the rapid acceleration of material interactions between these two geographically

¹ As cited by Kurt Grunwald, *Türkenhirsch: A Study of Baron Maurice de Hirsch, Entrepreneur and Philanthropist* (Jerusalem: Israel Program for Scientific Translations, 1966), 31.

² Arnold Toynbee, *A Study of History*, Abridgement of Volumes I–VI by D. C. Somervell (New York: Oxford University Press, 1987), 119.

proximate civilizations in the wake of these battles and away from these battlefields shaped a consistently more porous milieu that eschews the facile binaries while also implying some of their truisms. Marshall Hodgson's emphasis on the use of gunpowder as historical delineator of the three last great Islamic empires (the Ottomans, the Safavids, and the Mughals) and Eric Hobsbawm's particular emphasis on the Industrial Revolution as another delineator articulate a materialist model for history that operates more from a tactical, bottom-up approach than a top-down, geopolitical one, a model in which the creation of *things* (objects, places) is not perpetually subordinate to politics.³

The history of the railway, poised somewhere between the histories of the Industrial Revolution and of Western imperialism, provides an array of historiographic angles from which to gauge and ideally recalibrate the historical accuracy of the East/West and Progress/Decline narrative from which scholarship has only recently begun to move away from. One can underscore the material and environmental issues in equal measure to the patently political ones and emphasize either the theoretical implications of a technological sublime or the sovereign functions of imperial and national consolidation and identity. The object of the present study is primarily the former, although not at the expense of the latter. This introductory chapter sets out to identify the primarily political elements of the German construction of the Ottoman railway network in order to establish a base of both knowledge and context for the

³ Marshall G. S. Hodgson, *The Venture of Islam*, vol. 3, *The Gunpowder Empires and Modern Times* (Chicago: University of Chicago Press, 1977) and Eric Hobsbawm, *The Age of Revolution: 1789–1848* (New York: Vintage, 1996). Hobsbawm's view of the Ottoman empire is one that is particularly dim and somewhat problematic, noting that the empire represented the "most obvious fossil" of the nineteenth-century political landscape. This is excerpted from Selim Deringil, *The Well Protected Domains: Ideology and the Legitimation of Power in the Ottoman Empire, 1876–1909* (New York: I.B. Tauris, 1998), 6.

materialist concerns of the subsequent chapters. To be sure, the political implications of the railway project were massive and are certainly the most obvious. Yet the political elements of the project are not easily disentangled from the material elements, and this chapter will wrestle with those knotty moments as noteworthy problems in and of themselves.

1.2 Foreigners, Techno-Industrial Exchanges and Early Tanzimat Reforms

Tensions between the Ottoman empire and its immediate European neighbors (who were also known as the *Dar al-Harb* or “House of War”) after the Second Siege of Vienna continued, predictably, for a few decades. However, just one year after signing the Treaty of Passarowitz in 1719 and ceding a handful of European territories to the Habsburg crown and the Republic of Venice, the Ottomans granted their Austrian victors access to navigate the Empire’s rivers for purposes of trade.⁴ At the same time, King Frederick II of Prussia (r. 1740–1786) floated the idea to Catherine the Great of Russia (r. 1762–1796) that, although the Ottomans were a long-term enemy, it would be useful to bring Sultan Mustafa III (r. 1757–1774) into the Third Silesian War in order to upend Germany’s Austrian adversary from its southern frontier.⁵ While she was not convinced, and the Ottomans maintained neutrality in the Seven Years War, a reciprocal Prussian-

⁴ A detailed account of the eighteenth century trade history between the Ottoman empire and European powers as it relates to infrastructure can be found in the UK National Archives. See R. W. Brant to Foreign Office, February 4, 1907, NA FO 881/9437. Regarding the Treaty of Passarowitz specifically, see Caroline Finkel, *Osman’s Dream: The History of the Ottoman Empire* (New York: Basic Books, 2007), 338–42.

⁵ Finkel, *Osman’s Dream*, 363.

Ottoman military kinship developed. To the Prussians, the fearless Turks were brave warriors with subordinate weapons. To the Turks, the Prussians were poor warriors with superior weapons.

The reign of Mahmud II (r. 1808–1839) witnessed the most proactive measures in more than a century to maintain the territorial integrity of the empire, which had suffered one humiliating loss after another. The Treaty of Sened of 1808, orchestrated by the Grand Vizier Alemdar Mustafa Pasha (1765–1808), attempted to articulate a new, more modern *çiftlik* or land management system that would forge a greater allegiance between the *ayans* ([Heyet-i Âyân] regional administrators) and the Porte by reversing the quasi-feudal land ownership laws and hence diversifying the official imperial dominions of the empire among a greater number of minor lords loyal to the Porte by oath.⁶ In addition to recasting the internal dynamics of land usage, the Treaty of Sened demonstrated a more tactical approach to the maintenance of state sovereignty through being “modern,” that is, moving beyond the militaristic imperatives that had been the obsession of the prior century.

The Janissary (an elite corps of officers loyal to the Sultan) uprising of 1826 promulgated the notion that modernization was, at least at first, a concept relating primarily to military affairs. The Janissaries coalesced in a wave of mutinous spirit upon learning that Mahmud II had been forming an alternative army trained by French advisors, and they pledged their loyalty to their commanders rather than to the Sultan. In June of that year, many were murdered en masse and the rest were deposed to

⁶ For an excellent analysis of the innovations to the *Çiftlik* system, see Gillis Veinstein, “On the *Çiftlik* Debate,” in *Landholding and Commercial Agriculture in the Middle East*, ed. Çağlar Keyder (Albany: State University of New York Press, 1991), 35–56.

Thessaloniki (Selanik). Seeking to build a more systematic, modern army after the humiliation suffered through the Russo-Turkish War of 1828–1829, Mahmud II invited a Prussian delegation headed by Helmuth von Moltke (1800–1891) to İstanbul (Constantinople) in 1835 in a grand effort to “Prussianize” the Turkish military.⁷ Prussian military advisors acquired the Turkish language, while Turkish soldiers acquired Prussian guns, cannons, and other military technology. However, the Crimean War (1853–1856), which produced a brutal loss for the Russian Empire, proved that military modernization may have been a matter of too little too late and that, while a staunch military alliance had been forged, the condition of Turkey—which acquired the popular pseudonym “the sick man of Europe” in international circles—seemed to have passed the point of no return.⁸

The momentous Tanzimat reforms made plain the recognition that a modern military did not in itself constitute a modern empire. Sultan Mahmud II’s *Tanzimât Fermânı*, an imperial statute issued on November 3, 1830 (and continually augmented by a series of edicts), outlines the systematic and holistic development of a modern state whose constitutive qualities mirrored many of those revered in post-Enlightenment

⁷ Von Moltke’s letters from Turkey have been published as a collection and offer excellent insights into the process of the military transformation: Helmuth Graf von Moltke and Hayrullah Örs, *Türkiye Mektupları* (İstanbul: Remzi Kitabevi, 1969).

⁸ The term “sick man of Europe” has a long and fascinating, if somewhat convoluted, history. It is generally agreed that the term was first applied to the Ottoman empire by Czar Nicholas I of Russia and was used by diplomats to refer to the empire until 1914. The term has since come to generally be applicable to any small or medium-sized country in Europe whose economy is in peril. Aslı Çırakman has written what is probably the most systematic account of the term as it applies to the Ottoman empire, contextualizing it historically as an epithet largely connected to imagery and political scapegoating. See Aslı Çırakman, *From the “Terror of the World” to “The Sick Man of Europe”: European Images of the Ottoman Empire and Society from the Sixteenth Century to the Nineteenth* (Basel: Peter Lang, 2002).

Europe.⁹ The variety of the reforms and the ambition to implement them rapidly were breathtaking: a guarantee of personal honor and property (*Hatt-ı Şerif*) in 1839, the introduction of paper bank notes and the creation of a postal system in 1840, the institution of the first systematic imperial census in 1844, the abolition of human slavery and the creation of telegraph networks in 1847 [**Fig. 1.2**], the establishment of modern universities in 1848, the inauguration of steam-powered commuter ferries in 1851, the decriminalization of homosexuality in 1858, and the establishment of a central bank in 1866, among many others.¹⁰ Certain Tanzimat reforms, typically structural as opposed to ethical or technological, borrowed from European models. These included the 1840 recalibrations of the imperial finance system and the civil and criminal codes based on the French system, as well as the adoption of European-style courts at both the regular (*Meclis-i Ahkam-ı Adliye*) and supreme judiciary (*Meclis-i Ali-yi Tanzimat*) levels in 1853.

The *Hatt-ı Hümayun* reform of 1856, promising religious minorities complete and unequivocal protection under the law and fully understandable as the clearest ideological core of a number of earlier and later edicts relating to citizenship, remains one of the most often cited reforms, partly because of the complex set of historical and diplomatic

⁹ Hodgson has described the conceptualization and implementation of Tanzimat reforms as part of a momentous Western “transmutation” in which European hegemony dominated not only politically but also psychopolitically. See Hodgson, *Gunpowder Empires*, 231–32. Finkel has further characterized the reforms as constituting an ad hoc and notional system that was fundamentally based on the Ottoman attempt to maintain its imperial boundaries after a series of losses and, as such, a system that is directly connected to Western thought (Finkel, *Osman’s Dream*, 447–487).

¹⁰ Roderic H. Davison, *Reform in the Ottoman Empire, 1856–1876* (Princeton, NJ: Princeton University Press, 1963); Stanford J. Shaw and Ezel Kural Shaw, *History of the Ottoman Empire and Modern Turkey*, vol. 2, *Reform, Revolution, and Republic: The Rise of Modern Turkey, 1808–1975* (New York: Cambridge University Press, 1977).

factors it integrated. On the one hand, it could be said to demonstrate a full evolution of the *millet* systems (semi-autonomous confessional corporations) of coexistence that preceded it. On the other, as Benjamin Braude and Bernard Lewis have argued, it articulated a protectionist impulse.¹¹ As Europe and the Ottoman empire grew closer through apparatuses of modernity—namely, transportation and communications—the Porte needed to find ways to pacify ethnic and religious minorities who might utilize or otherwise be influenced by modern technology (telegrams, publishing, etc.) to foster irredentism and, later, revanchism. Ottoman “modernization,” as such, cannot simply be understood as an enlightened European-inspired project but must also be understood as one whose urgency was conceived largely as a necessity for protecting the empire from European spheres of influence or the necessity to be “Western despite the West.”¹²

Although the British rightfully claim the first steam locomotives and commercially viable railway networks as their own, it was the German economist Friedrich List (1789–1846) whose theoretical ruminations on and support for the expansion of European railway networks provided the paradigm of rail as a total modern project commensurate with Tanzimat ideas. In his 1841 publication *Das nationale System der politische Ökonomie*, List aphoristically states six major ways in which the rail binds nations and cultivates progress:

¹¹ See Benjamin Braude and Bernard Lewis, eds., *Christians and Jews in the Ottoman Empire: The Functioning of a Plural Society* (New York: Holmes & Meier, 1982), 30. This is the earlier, unabridged edition. Braude and Lewis’s study is among the most informative on the topic and contextualizes the formal systems of Ottoman multicultural governance since the fifteenth century.

¹² I borrow this concept—of being “West despite the West”—from the slogan of the women’s rights movement in the Ottoman empire in the 1910s, popularized largely by the women’s journal *Kadın Dünyası*. Hans-Lukas Kieser, *A Quest for Belonging: Anatolia Beyond Empire and Nation* (İstanbul: Isis, 2007), 38.

1. As a means of national defense, it facilitates the concentration, distribution and direction of the army.
2. It is a means to the improvement of the culture of the nation, as it facilitates the distribution and promotes the rapidity of distribution of all literary products, and the results of the arts and sciences. It brings talent, knowledge and skill of every kind readily to market, and increases the means of education and instruction of each individual and of each class and age.
3. It secures the community against dearth and famine, and against excessive fluctuation in the prices of the necessities of life.
4. It promotes the hygienic condition of the community, as it destroys distances between the sufferer and his means of cure.
5. It promotes social intercourse, and brings friend to friend, and relative to relative.
6. It promotes the spirit of the nation, as it has a tendency to destroy the Philistine spirit arising from isolation and provincial prejudice and vanity. It binds nations by ligaments, and promotes an interchange of food and of commodities, thus making it feel to be a unit. The iron rails become a nerve system, which, on the one hand, strengthens public opinion, and, on the other hand, strengthens the power of the state for police and governmental purposes.¹³

List's beliefs that the rail could conflate "defense" and "intercourse" as well as "concentration" and "distribution" while simultaneously eradicating "isolation" and "vanity" were widely transposable notions. List's design for the First Great German Railway Network of 1833 [Fig. 1.3] bears an unapologetic, Pan-German tenor, connecting Prussia with the patchwork of Germanic states to its south and west. The lines are determined by the locations of important cities and the anticipation of important trade routes. The nationalist "organic" ambition of the network, which was in large measure

¹³ As cited by John J. Lalor, ed., *Cyclopædia of Political Science, Political Economy, and the Political History of the United States* (New York: Maynard, Merrill, 1890), 499. See also Friedrich List, *Das deutsche National-Transport-System: in volks- und staatswirtschaftlicher Beziehung beleuchtet* (Leipzig: J. F. Hammerich, 1838); and Friedrich List, *Das nationale System der politischen Ökonomie* (Suttgart: Cotta, 1841). List, considered to be the most widely read German economist of his era aside from Marx, has also been credited with influencing both the national socialist ideology and the pan-European principles that led to the eventual creation of the European Union. Although his work on railways is typically considered as part and parcel of his economic ideas, the latter also demonstrate a conceptual autonomy that is useful to this analysis.

implemented in the decades that followed, is as geopolitically polemical in its pan-Germanism as it is in its delineation of definite borders with its immediate neighbors.

1.3 British Dominance under Abdülmecid I, 1851–1861

Such geopolitical and technological strategies were not lost on the Porte, nor were they outright unfeasible. But Sultan Abdülmecid I (r. 1839–1861) and Sultan Abdülaziz (r. 1861–1876) after him had to contend with the fact that the state lacked the capital and technical expertise to execute a railway network completely on its own in addition to balancing the inevitable and the further intertangling of European economic hegemony and expertise that would come with it. In the beginning, the experts were typically British, and their economic interests in the empire, particularly outside of inner Anatolia and Rumelia, were well-established.

The British entrepreneur Moshe Montefiore (1784–1885) first floated the idea of financing a railway connecting the port of Jaffa with Jerusalem in Palestine to his British peers in 1838, and he pitched the idea to Home Secretary Henry John Temple (1784–1865; a.k.a. Lord Palmerston) in 1856 in anticipation of the visit from Grand Vizier Mehmed Emin Âli Pasha (1815–1871).¹⁴ Montefiore, Temple, and Mehmed Emin Âli signed a tentative agreement and enlisted the expertise of the traveler and author Laurence Oliphant (1829–1888), only to learn a few months later that the Porte was

¹⁴ Abigail Green, *Moses Montefiore: Jewish Liberator, Imperial Hero* (Cambridge, MA: Harvard University Press, 2010), 252–54.

unwilling to relinquish the land required for the project, which effectively brought the project to an end.¹⁵

Abbas I (r. 1849–1854), Vali of Egypt and Sudan, was the first to establish a railway in the empire, contracting the English civil engineer Robert Stephenson (1803–1859) in 1851 to survey and build a line linking Alexandria to Cairo.¹⁶ The first part of the line spanned from Alexandria to Kafr el-Zayyat along the Rosetta branch of the Nile and was completed and opened for operation in 1854.¹⁷ [Fig. 1.4] Two years later, the line to Cairo was completed under the reign of Sa'id Pasha (r. 1854-1863), Vali of Egypt, and in 1858 the line was extended to Suez, becoming the first means of modern transport to connect the Mediterranean with the Indian Ocean.¹⁸ The rail served primarily British interests insofar as it proffered a far more expedient trade route between Europe and India, but it also produced some revenue within Egypt, particularly through the tariffs levied at Suez and Alexandria.

With the Crimean War over in 1856, railway activity in the Ottoman empire steadily flourished, with the British maintaining their influence, at least at first. In Rumelia, a stagnant plan to connect a channel between the Danube at Rasova and the Black Sea at Tuzla was scrapped when a study of the largely waterlogged-soil properties of the Danube basin by the British engineering company Liddell and Gordon determined that a railway between Constanta (Köstence) and Cernavoda (Boğazköy) would be faster

¹⁵ Ibid.

¹⁶ Michael Bailey, “Wider Horizons,” in ed. Michael Bailey, *Robert Stephenson—The Eminent Engineer* (London: Ashgate, 2003), 149–58.

¹⁷ Ibid.

¹⁸ Ibid.

and less expensive.¹⁹ The same year, the British engineer John Trevor Barkley (1826–1882), formerly a manager at the Heraclea mines, surveyed the sixty-six-kilometer route and formed the Black Sea Railway and Free Port of Küstendijie Company, receiving an imperial concession the same year.²⁰ Unlike in Egypt, where the railway contracted the majority of its labor, all ordinary male citizens living in the villages between Hârşova and Rasova were forced to assist in the construction of the railway, mainly executing tasks that required little skill such as the construction of embankments and making of ballast.²¹ Ground was broken for the project in 1859, and it was completed a year later.²²

In Anatolia, the first realized rail connection was a scheme to connect İzmir (Smyrna) and Aydın, 130 kilometers inland. On September 22, 1856, an imperial concession was granted to a consortium of British financiers named the “Oriental Railway Company” and led by the İzmir-based trader Robert Wilkin (b. 1803).²³ The first section, connecting İzmir to the village of Seydiköy, was completed in October 1858. The final section to Aydın, which was plagued by a flurry of financial difficulties, was

¹⁹ Uwe Müller and Helga Schultz, *National Borders and Economic Disintegration in Modern East Central Europe* (Berlin: A. Spitz, 2002), 94–95. An original account can be found in Henry C. Barkley, *Between the Danube and the Black Sea: Or, Five Years in Bulgaria* (London: J. Murray, 1876).

²⁰ Müller and Schultz, *National Borders*, 94–95.

²¹ Ibid.

²² Ibid.

²³ Sir MacDonald Stephenson, *Railways in Turkey: Remarks upon Practicability and Advantage of Railway Communication in European and Asiatic Turkey* (London: John Weale, 1859), 28; Murat Özyüksel, *Osmanlı-Alman ilişkilerinin gelişim sürecinde Anadolu ve Bağdat Demiryolları* (İstanbul: Arba, 1988), 10; A Nedim Atilla, *İzmir Demiryolları* (İzmir: İzmir Büyükşehir Belediyesi Kültür Yayını, 2008), 56.

completed in 1866. The primary goal of the railway was to tap the resources of the rich Aydın plain and bring them to İzmir to be exported.

Despite the important developments in the *eyalets* (administrative provinces) of Egypt, Silistra, and Aydın, the most important foreign figure in the early conceptualization of a pan-regional rail network was, without a doubt, Francis Rawdon Chesney (1789–1872). Chesney, a British general and explorer, is usually thought of as a pioneer of another form of infrastructure: canalization. His 1830 study on the creation of a canal at Suez is often credited as the groundwork for Ferdinand de Lesseps's later execution of the project in 1869.²⁴ Chesney largely retired from major works upon completion of that study, until he returned to the Near East in 1856 to conduct a survey of the Euphrates.²⁵ The following year, Chesney published the *Report on the Euphrates Valley Railway*, a concise seven-page study that systematically analyzes the task of constructing a national railway into four categories: “1st. The advantages that would accrue to England. 2nd. The existing commerce, and its extension. 3rd. The difficulties expected from the Arabs. 4th. The means of laying down the proposed railway.”²⁶ Charting the approximately 1000-mile (1609-kilometer) overland route from the Mediterranean port of İskenderun (Alexandretta) to the Persian Gulf port of Basra, the study is a seminal template for the knowledge that European powers considered foundational for building a railway abroad. The template expands upon the commercial, technological, and nationalistic aims articulated by List to include a fourth category

²⁴ House of Commons, *Report from the Select Committee on Steam Navigation to India* (London: 1834).

²⁵ Francis Rawdon Chesney, *Report on the Euphrates Valley Railway* (London: Smith, Elder, 1857).

²⁶ *Ibid.*, 1.

centered on cultural concerns, in this case, the challenges posed by the fact that Arabs happened to reside in the area that was to be traversed and that Arab culture, unlike English, Scottish, or Welsh culture, was ostensibly predisposed to be antagonistic toward modernization.

But Chesney dispelled the necessity for concern about race and culture as readily as he figured it into the equation in the first place, noting that “trade has *always* existed in these countries” and “it is obvious that if they were to endeavour to stop trade altogether ... they would do themselves an irreparable injury, and they are perfectly alive to their own interests on this matter.”²⁷ He concluded, “I think, if judiciously managed by those who know something of their peculiarities, we have nothing to fear from the Arabs.”²⁸

Of more importance for Chesney was the Sultan’s effective dominion over his own territories and pashas and his ability to facilitate a smooth and secure construction process: “Bearing in mind that the Sultan’s power is *unquestioned* at Mosul (Mossul, Musul), at Baghdad (Bağdat), at Basra (Bussorah), and at other places, we have only to fear the predatory movements of the Nomad tribes who intervene... I do not apprehend any serious difficulty from this quarter; especially as we may expect the assistance of the sedentary Sheikhs of the towns along the Euphrates and Tigris, who in some measure, depend indirectly upon the Sultan through the chief Pashas.”²⁹ Chesney made it clear, as it had been with Suez, that the primary goal of a Euphrates Valley Railway was to benefit the British through its creation of a faster link between Britain and India. Nonetheless, he

²⁷ Ibid., 5.

²⁸ Ibid.

²⁹ Ibid., 6.

also expressed his cognizance of the project as one intrinsically related to Tanzimat reforms, noting them explicitly.³⁰ He used the reduced cost of carrying goods by rail to remodel domestic and international trade statistics for Aleppo (Halep / Haleb) province since 1853 and concluded that the Porte would also reap profits from the rail within approximately one year of full operation.³¹

It is not clear why the Porte did not adopt Chesney's project, but it is safe to say that infrastructural upgrades were generally perceived to have greater immediate importance to the Rumelian and Western Anatolian provinces. Some historians have viewed this situation as the result of the Ottoman desire to emphasize modernization on its European, as opposed to African or Asian, frontiers.³² Others have considered it in the wider context of protectionist desires directly related to the trauma of the Crimean War, namely, as a means to stymie the further fanning of the fires of Balkan nationalism by St. Petersburg.³³ The true answer is most certainly a combination of the two. In many ways, the emphasis on the European frontiers seemed to work. A deeply symbolic event for the Tanzimat ideology to that end was the "Concert of Europe."³⁴ In exchange for the

³⁰ Ibid., 4.

³¹ Ibid., 4. These statistics were made available to Chesney through the records of the recently deceased Süleyman Pasha, who had himself paid into the Ottoman treasury "17,000 purses, which being taken at 3 per cent, gives upwards of two million sterling," 4.

³² See Vahdettin Engin, *Rumeli Demiryolları* (Istanbul: Eren, 1993); and Bülent Bilmez, "European Investments in the Ottoman Railways, 1850–1914," in *Across the Borders: Financing the World's Railways in the Nineteenth and Twentieth Centuries*, eds. Ralf Roth and Günter Dinhl (London: Ashgate, 2008), 207–24.

³³ Finkel, *Osman's Dream*, 527.

³⁴ Şükrü Hanioglu discusses the development of Tanzimat reforms within the context of the Treaty of Paris and the "Concert of Europe" in *A Brief History of the Late Ottoman Empire* (Princeton, NJ: Princeton University Press, 2008), 72–108.

purported benefits associated with the increased diplomatic connections, Abdülmecid I and Grand Vizier Mehmed Emin Ali Pasha promised to accelerate Tanzimat reforms even further, particularly as they related to the treatment of the Christians within the empire.³⁵ Railways in the Balkans represented the most obvious platform for doing this.

1.4 Diversification and Expansion under Abdülaziz

The accession of Abdülaziz to the throne in June 1861 indeed marked the acceleration of modernizing reforms, at least in part due to the sultan's love of Western material progress.³⁶ In the expansion of the rail, the British maintained a stronghold on new rail construction for a few years. In September 1861, just a matter of weeks after the accession of Abdülaziz to the throne, the British secured the 224-kilometer Ruse (Rusçuk)-Varna concession and thereby advanced their presence on the Black Sea. The negotiations occurred entirely in London with the ambassador Kostaki Musurus Pasha (1807–1891).³⁷ The line, completed in 1866, was the first to link the Ottoman empire directly to another political unit—albeit a bittersweet one, as it had been lost four years prior—the United Principalities of Moldavia and Wallachia (subsequently known as the Kingdom of Romania), at the Danubian town of Giurgiu, which in turn linked to the well-

³⁵ Ibid.

³⁶ Abdülaziz's construction of Dolmabahçe Palace is the most overt symbol and manifestation of his appreciation for Western materialism, as it incorporated state-of-the-art European technology and was conceived from the beginning as an alternative to the antiquated facilities at Topkapı. See Ahmet Ersoy, "On the Sources of the 'Ottoman Renaissance': Architectural Revival and its Discourse During the Abdülaziz Era, 1861–76" (PhD diss., Harvard University, 2000).

³⁷ NA FO 881/3639.

developed Austro-Hungarian rail network and the rest of Europe via Bucharest and onward through Transylvania. In 1863, the British received more concessions in Aydın *eyalet*, expanding their role in İzmir with the formation of the ninety-three-kilometer Smyrna-Cassaba Railway. The line opened to the city of Manisa, a burgeoning industrial center, in October 1865 and then to Cassaba (Turgutlu) in January 1866.³⁸

Yet Abdülaziz also came to understand the particular threats posed by such a unilateral relationship. The British navy already played a disproportionately large role in the naval affairs of the Mediterranean, Black, and Red Seas as well as the Persian Gulf, and the extension of their marine power to include key economic ports on all four maritime frontiers had the creeping semblance of colonial encroachment.³⁹ Drawing on the Ottoman empire's role as part of geopolitical Europe, Abdülaziz and his advisors began a concerted effort in the 1860s to diversify foreign speculations, investments, and expertise in rail construction among a broader range of powers that included Belgian, French, Swiss, Austrian, Ottoman, and most notably, German parties.

Although France was not formally involved in the construction of the Ottoman rail network until 1868, the country's involvement can be traced to the friendship that developed between Empress Eugénie (r. 1853–1871) and Abdülaziz in the 1860s. It appears likely that during the princess's diplomatic visit in 1866, she and Abdülaziz discussed the matter. When French parties entered into a formal financial role in the development of the Rumelian railways two years later, the Princess commissioned a scale

³⁸ This date is according to Vedat Eldem, *Osmanlı İmparatorluğu'nun İktisadi Şartları Hakkında Tetkik* (Ankara: Türk, Tarih Kurumu Basımevi, 1994; original printing 1970), 104.

³⁹ An excellent account of the British naval presence in the Mediterranean can be found in Thomas W. Gallant, *Experiencing Dominion: Culture, Identity and Power in the British Mediterranean* (Notre Dame, IN: University of Notre Dame Press, 2002).

model of a railway car made of wood and gold leaf and gave it to Abdülaziz as a gift.⁴⁰

[Fig. 1.5] The wagon's inscription states: "Private railway car operating on the Rumelia line, given as a present to Sultan Abdülaziz by the French Empress Eugénie."⁴¹ Playful yet politically potent, the model train intertwines the diminutive and casual innocuousness of a souvenir with the profoundly political situation.

Austria had a particular vested interest in the development of an Ottoman railway network. In addition to creating a greater web of interconnectivity with their very own "Orient" through the Kaiser Franz Joseph Orientbahn, completed in 1866, the Orientbahn linked Vienna and Budapest with southerly cities including Pragersko in Carniola, Nagykanisza (Großkirchen), Székesfehérvár (Stuhlweißenburg), and Pécs (Fünfkirchen) in Hungary, Osijek (Esseg) in Slavonia, and Zemun (Semlin, now a part of Belgrade) in the military frontier of the Voivodeship of Serbia. The Ottoman railways, if extended through the regions of Bosnia and Herzegovina, would inevitably bring that region even closer into the Austrian orbit.⁴²

While Austria focused its energies on its contiguous frontier, the American-educated German railway engineer and esoteric Charles Franz Zimpel (1801–1879) directed his attention to the Holy Land.⁴³ Although Zimpel honed his railway

⁴⁰ Şennur Şentürk, Toprak Zafer, and Selahattin Özpabıyıklar, *Demir Yol: Tren Çağı: Demiryolları* (İstanbul: Yapı Kredi Kültür Sanat Yayıncılık, 2003), 46.

⁴¹ Ibid.

⁴² The most comprehensive analysis of the Austrian *Orientbahn* is Walther Rechberger, "Zur Geschichte der Orientbahnen: Ein Beitrag zur österreichisch-ungarischen Eisenbahnpolitik auf dem Balkan in den Jahren von 1852–1888" (PhD diss., Universität Wien, 1958). The Railway is sometimes simply called the *Südbahn*.

⁴³ Zimpel studied in the United States and published his dissertation on the burgeoning American rail network in comparison with other European networks: Carl Friedrich Zimpel, *Das Eisenbahnbauwesen von Nordamerika, England und anderen Ländern* (Vienna: Förster, 1840).

construction skills while studying in the United States, where he is famous for having produced a survey of New Orleans described by one reporter as the most “accurate and beautifully executed map in the United States.” Zimpel’s heart, like that of his contemporary Friedrich List, remained squarely with the project of pan-Germanism through rail.⁴⁴ Zimpel’s 1865 treatise *Railway between the Mediterranean, the Dead Sea, and Damascus by way of Jerusalem with branches to Bethlehem, Hebron, Nablous, and Tiberias, etc.*, written in Istanbul and published in Frankfurt and London, makes the unusual and entirely original case that railway development in the Levant would serve to create a productive ecumenical symbiosis between Ottoman technoeconomic modernization and the region’s supreme significance for the major monotheistic religions. The development of Jerusalem as a quasiutopian *Weltstadt* for Christians, Jews, and Muslims was of supreme importance to Zimpel, an ambition that would best be served by a modern maritime connection at Eilat or Aqaba and a major land terminus at Damascus.⁴⁵ On the heels of Zimpel’s treatise, a plan arrived from the Württembergian architect, archaeologist, and city planner Conrad Schick (1822–1901), who published a

Zimpel is known in his German writings as Carl Friedrich Zimpel. Zimpel’s work in the United States focused primarily on New Orleans, where he also did a great deal of cartography. His work on Palestine was published in Charles Franz Zimpel, *Straßen-Verbindung des mittelländischen mit dem Todten Meere und Damascus über Jerusalem, m. Heranziehung von Bethlehem, Hebron, Tiberias, Nazareth, etc.* (Frankfurt am Main: Brönnner, 1865). Zimpel’s later publications turn their focus to the entirely different topic of homeopathic medicine, and it would appear that he left his work on railroads behind sometime in the 1860s.

⁴⁴ See Jessie J. Poesch, *Printmaking in New Orleans* (Jackson, MS: University Press of Mississippi, 2006), 81.

⁴⁵ Zimpel, *Railway between the Mediterranean*, 17-20.

revised proposal for Montefiore's Jaffa-Jerusalem line via Ramallah, Beit, and Horon in 1867, a route considered for some time the most viable to date.⁴⁶

In 1868, the Porte itself initiated the bidding for a conglomeration of lines in the Rumelian provinces, known in international materials as the *Chemins de fer Orientaux* and in national materials as the *İstanbul-Viyana Demiryolu* (the İstanbul-Vienna railway). Unlike the British-operated railways of the empire (which had by that point been completed), the ambitious scheme in Rumelia stood to benefit political needs more than economic ones. The five subdivisions of the network make the geopolitical intentions of the network clear. The first subdivision, 318 kilometers connecting Edirne (Adrianople) and İstanbul, facilitated a connection between the imperial capital and the Rumelian front. The second, 149 kilometers connecting Edirne to Alexandroupolis (Dedeağaç), facilitated a connection to an Aegean port as well as to the eastern Greek front. The third, 386 kilometers connecting Edirne to Belovo, facilitated a connection to the core of Bulgaria. The fourth, 363 kilometers connecting Thessaloniki to Kosovska Mitrovica, facilitated a connection between the important port city and an Albanian frontier. The fifth, 102 kilometers spanning Bosnia to the edge of its Hungarian frontier at Dobrjlin, facilitated a consolidation of the polyethnic province and a means of supervision over its notorious dissidence.

⁴⁶ This information is extrapolated from a map Schick published with Justus Perthes, Gotha for *Petermanns geographische Mittheilungen*, entitled "Originalkarte des Theiles von Palaestina zwischen Jaffa und Jerusalem: Mit besonderer Beruecksichtigung der vorhandenen und projektirten Communicationen: Nach Originalzeichnungen und mit Benutzung der neuesten Aufnahmen und Forschungen von Conrad Schick, Institutsvorsteher in Jerusalem." Schick also wrote extensively on Jerusalem later in life. See Conrad Schick, *Die Stiftshütte, der Tempel in Jerusalem und der Tempelplatz der Jetztzeit* (Berlin: Weimannsche Buchhandlung, 1896).

The support, financing, and technical expertise for such a large project in as diverse and volatile a geopolitical fold as this represented an undertaking that the Porte recognized as ideally suited to a multinational entity. The concessions for all five sections were granted to a conglomeration of French, Belgian, Swiss, and Austrian investors, each with a 25 percent stake, in May of 1868.⁴⁷ In less than a year, the financial structure of the project grew shaky, and Abdülaziz transferred the concession to the immensely wealthy Bavarian-born financier and philanthropist Maurice de Hirsch (1831–1896).⁴⁸ Hirsch established the Imperial Turkish Railway Company in Paris, where he lived, that same year, and he hired Wilhelm von Pressel (1821–1902), an engineer born in Stuttgart who had steadily risen in esteem through his work on the Franz Joseph Orientbahn.⁴⁹ “Türkenhirsch,” as the German press affectionately called him, had developed a hobby interest in railway construction through the work of the French engineer, economist, and Saint-Simonian Michel Chevalier (1806–1879), whose visionary 1832 publication *Système de la Méditerranée* described (among other things) a railway connecting the English Channel to the Persian Gulf.⁵⁰ Antoine Picon has carefully detailed Chevalier’s proposal, arguing that it was responsible for bringing the Mediterranean Sea to the

⁴⁷ Grunwald, *Türkenhirsch*, 31–32.

⁴⁸ Ibid. This is the best biography on the life of Maurice de Hirsch; despite its title, it accounts for a wide range of Hirsch’s activities beyond his involvement with the Ottoman railways.

⁴⁹ Pressel’s biography has not received any major treatment to date. The most complete account is an encyclopedia entry. See Institut für Neuzeit- und Zeitgeschichtsforschung, *Österreichisches biographisches Lexikon 1815–1950*, Band 8 (Vienna: Österreichische Akademie der Wissenschaften, 1981), 268.

⁵⁰ Grunwald, *Türkenhirsch*, 28–29.

attention of a greater European audience as an industrially connectable space,⁵¹ and it is noteworthy that it was Chevalier, not List, who persuaded Hirsch to open his pockets so deeply to what then seemed like an even deeper risk.

With sustainable financial arrangements, completed surveys, land acquisitions and a workforce in place, successive construction on the Rumelian lines began in 1870. In just the same year, deeply influenced by his confidant, the later Grand Vizier Ahmed Şefik Mithat Pasha (but then the Governor of Baghdad vilayet; 1822–1883), Sultan Abdülaziz turned his attention to the Anatolian hinterland and, much more distant on the horizon, the empire’s connection to all points east via Baghdad, the Persian Gulf, and eventually the Indian Ocean.⁵² Abdülaziz and Midhat Pasha’s plan comprised an autonomously Ottoman-operated railway that would gradually grow eastward as resources—expert, technological, and financial—became available to them.⁵³ The immediate goal was to connect the densely populated and newly industrial areas of the northern Marmara littoral with a standard gauge railway whose terminus at Kadıköy, a suburb of İstanbul on the Asian side of the Bosphorous, would provide a gateway back to Europe.⁵⁴

The history of the scheme tends to get overshadowed by the lines that had foreign management. But while foreign dominance in the realm of railways became an

⁵¹ Antoine Picon, “Michel Chevalier’s Systeme de la Mediterranee: Geopolitics, Technology and Utopia” (paper presented at the conference “The Mediterranean: Region Making by Design”, The Harvard University Graduate School of Design, Cambridge, MA, March 14, 2013).

⁵² Özyüksel, *Osmanlı-Alman İlişkilerinin*, 13.

⁵³ *Ibid.*, 13–17.

⁵⁴ *Ibid.*

incontrovertible reality by the end of the nineteenth century, and despite the fact that even the Anatolian line reaching from İstanbul to Baghdad would eventually need to be ceded to foreign hands, the reality holds that this line was and would remain the most singular geostrategic vision comprising the empire's infrastructure for the next fifty years. The conceptual composition of the project remained wholly Ottoman in nature. Building upon his experience with both the geopolitical promise and the perils of the empire's distant Mesopotamian provinces, it was Midhat Pasha who married the growing Ottoman appetite for rail with the lived knowledge and an even administrative hand. Caroline Finkel has duly described Midhat Pasha as a "true representative of Tanzimat optimism, who believed that separatist tendencies could be best countered by demonstrating the benefits of good government."⁵⁵ Midhat Pasha's liberal faith in services and good government could even irritate the Sultan himself, and most certainly irritated the British who found his ambition and reformism bullheaded and insubordinate.⁵⁶ Midhat Pasha had maintained an interest in Chesney's proposal and ultimately announced a renewed intention for the line in 1871.⁵⁷ Midhat Pasha extended Pressel's service to the Porte by commissioning him with a detailed study of the span of the empire extending from the Gulf of Alexandretta to the Persian Gulf, which Pressel undertook from 1872 to 1873.⁵⁸

⁵⁵ Finkel, *Osman's Dream*, 500.

⁵⁶ Tony Dodge, *Inventing Iraq: The Failure of Nation Building and a History Denied* (London: C. Hurst, 2003), 43–62. Abdülaziz and Midhat Pasha had a famously tumultuous relationship that resulted in Midhat's repeated firing and rehiring.

⁵⁷ J. A. Zahm, *From Berlin to Bagdad to Babylon* (London: D. Appleton, 1922), 152.

⁵⁸ Özyüksel, *Osmanlı-Alman İlişkilerinin*, 13–16; McMurray, *Distant Ties*, 18. See also DM NL 13II/24.

Construction on the Haydarpaşa (Haidar Pacha / Haidar Pasha / Haydarpasha) station at Kadıköy and the line eastward began in the summer of 1871.⁵⁹ [Fig. 1.6] Just over a year later, the line reached twenty-five kilometers inward to the town of Pendik, with twelve stations at an average distance of every two kilometers.⁶⁰ In January 1873 the line reached Gebze, and in August of the same year the line reached its terminus for the foreseeable future at İzmit. Although the route mostly hugged the Marmara coast, it also made some strategic and direct connections, such as at Hereke, twenty kilometers east of Gebze and the site of the imperial fabric factory where the silks, tapestries, and upholsteries of the royal palaces had been produced since 1843.⁶¹

The years immediately following the successful and largely autonomous railway completion to İzmit, replete with modern storehouses and silos for commercial purposes [Fig. 1.7], witnessed a boost in additional plans for autonomous railway development and management.⁶² In 1872, Ottoman-run construction began on a short line connecting Bursa and Mudanya (*Chemin de Fer Moudania-Brousse*).⁶³ The British expanded their importance in rail affairs in and around İzmir, obtaining a concession for an extension from Turgutlu to Alaşehir in 1872, but the Porte's diplomatic communication regarding

⁵⁹ Özyüksel, *Osmanlı-Alman İlişkilerinin*, 14.

⁶⁰ This is interpolated from dividing the number of stops between Haydarpaşa and İzmit by their kilometric distance.

⁶¹ The best account of Hereke's history and output is Onder Küçükerman, *Anadolu'nun Geleneksel Halı ve Dokuma Sanatı İçinde Hereke Fabrikası: Saray'dan Hereke'ye Giden Yol* (Ankara: Sümerbank Genel Müdürlüğü, 1987).

⁶² The railway was built by a French subcontractor and operated by the Ottoman government for two years before being leased to a concessionaire and subsequently sold to a British firm. See Ochsenwald, *Hijaz Railroad*, 19; George Young, comp., *Corps de Droit Ottoman* (Oxford: Clarendon Press, 1905), IV:117–18.

⁶³ Ibid., 62n1, 70–71; J. Courau, *La Locomotive en Turquie d'Asie* (Brussels: Guyot, 1895), 4.

the envisioned railway to Baghdad appears to have been deliberately opaque at first. Reporting to parliament member Sir George Jenkinson (1817–1892) in 1871, Kostaki Musurus Pasha (1807–1891) said:

You are well aware that I should like to see constructed a railway from Constantinople to Bussorah [sic], and the Imperial Government would readily grant the same terms for making it; but as I fear this is more than can be accomplished at present, I content myself with the line from the Mediterranean for the Persian Gulf: whether the valley of the Euphrates or the Tigris be preferred is immaterial for me... So that you see it is not the conditions of the Turkish Government which are wanting to any other line, but rather because of the cheapness and natural advantages offered by the Euphrates Valley route, especially to England, whose assistance is requisite.⁶⁴

Musurus Pasha's affirmation that the empire remained interested in the route put forward by Chesney, which connected the Mediterranean to the Persian Gulf, is deceptive at best. An overland route to Baghdad extending the Haydarpaşa-İzmit line was in fact the desired route being discussed by the Porte. After all, what was an imperial railway if it did not reach the imperial capital? Abdülaziz and Midhat Pasha remained conflicted about the extent to which they wished to involve the British in the project. At least for the time being, their trust swayed toward the newly unified German empire and the new leadership of Kaiser Wilhelm I (r. 1871–1888) and 1st Chancellor Otto von Bismarck (1815–1898). For his part, von Bismarck, famous for his *Realpolitik*, made the nonsense observation that a tighter union with the Ottoman empire, which had claimed bankruptcy in 1875, might not be entirely impractical. "Turkey could never become dangerous for us," he noted in 1876, "but her enemies could possibly become our

⁶⁴ Select Committee on Euphrates Valley Railway, House of Commons, Parliament of Great Britain, *Report from the Select Committee on Euphrates Valley Railway* (London: 1871), vii.

enemies.”⁶⁵ This was a tepid back-step from the more well-known adage that the whole of the Balkans was “not worth the bones of a single Pomeranian grenadier.”⁶⁶

Bismarck’s bombastic rhetoric and unapologetic pragmatism is often identified as a key component in the devolution of Germany’s relationship with England during the last quarter of the nineteenth century. Moreover, Germany’s eventual dominance and ambition in the construction of the Ottoman rail network are considered one of the major dominos that led to the instigation of the Great War. It is, in this light, rather surprising to learn, from a previously unpublished letter written to Bismarck only four days after Abdülaziz’s deposition on May 30, 1876, that the British consulate in Berlin actually *encouraged* Germany to become as involved as it wanted to be, perhaps even condoning downright colonization. The letter makes the following case:

Germany has no such misfortune to rectify the economic plight of the Ottoman empire; but this prospect it seems to my humble prognosis would prove immensely to her advantage. Germany would send the most and best colonists, the railway construction with the Austrian frontier is complete, and the colonies would thus be in rail communication with their mother country.⁶⁷

This is precisely the course she would take.

⁶⁵ Paul K. Butterfield, “The Diplomacy of the Baghdad Railway, 1890–1914” (PhD diss., Georg-August-Universität Göttingen, 1932), 33.

⁶⁶ This has most often been attributed to a comment published in *Hamburger Nachrichten*, July 17, 1892: “Wort vom pommerschen Grenadier und dem Werth seiner gesunden Knochen (habe) für uns und alle friedliebenden Deutschen noch dieselbe Geltung wie früher.” See also Gregor Schöllgen, *Imperialismus und Gleichgewicht: Deutschland, England und die orientalische Frage 1871–1914* (Munich: 2000), 16.

⁶⁷ Colonel John Cox Gawler to Otto von Bismarck, London, June 3, 1876, Ba R901/15067, 13b.

1.5 German Infiltration and the Early Hamidian Years, 1876–1897

Following the unavailing ninety-three day reign of his brother Murad V (1840–1904, r. May 30 to August 31, 1876), the efficacious thirty-four-year-old Abdülhamid II (r. 1876–1909; henceforth identified simply as “Abdülhamid”) became Sultan and Caliph and would remain there for thirty-two years until his deposition at the hand of the Young Turks.⁶⁸ No figure played a more sustained and impactful role in the development of the Ottoman rail network, a role that owed as much to his personal reform ambitions as to the sheer duration of his tenure. Abdülhamid entered his reign with an empire already at war to suppress the nationalist uprisings in Serbia and Montenegro, and these would escalate into a full-blown war with Russia, who fanned the flames of Balkan nationalism in retaliation for Russia’s defeat in the Crimean War. The Russo-Turkish war officially ended less than a year later with the Treaty of San Stefano, which severely maimed the empire’s—and Abdülhamid’s—sense of sovereignty and physical safety: the principality of Bulgaria was, with additional provisions from the Treaty of Berlin of 1878, reestablished as a sovereign state; Romania, Serbia, and Montenegro gained independence; Cyprus was leased to Britain; and the eastern stronghold of Kars was ceded to the Russian empire. The inroads made in rail development in the southern Balkans proved to be too little too late, and the Ottoman effort to develop infrastructure, particularly in Bulgaria, wound up benefiting Bulgaria more than it did the Ottomans.

Traumatized by the events he faced immediately upon accession, Abdülhamid articulated five principal and strategic amendments to the Tanzimat program that he

⁶⁸ Finkel, *Osman’s Dream*, 483.

conceived as absolutely necessary for the survival of the empire and that served to accelerate modernization without overly enfranchising the polity. These principles included: 1) exclusive rule, 2) Pan-Islamism (*İttihād-ı İslam*), 3) military modernization without overarching empowerment of the officer corps, 4) a commitment to financial independence from Europe, to the extent this was possible, and 5) a tacit alliance with at least one major European power.⁶⁹ The first course of business was radical change and the suppression of further internal disintegration, which was largely conceived as the product of a liberalizing democracy. On February 13, 1878, shortly before the peace at San Stefano, Abdülhamid dissolved the constitution and dismissed the parliament. This was a gutsy move, to say the least, but also an eminent act of Bismarckian *Realpolitik*.

With the Ottoman state wounded and bankrupt, significant railway development remained at a virtual standstill between 1875 and 1888, the year Kaiser Wilhelm II assumed the German emperorship.⁷⁰ Rather than focusing on high-profile projects and reforms, Abdülhamid concentrated his efforts during his first full decade as the lone adjudicator of Ottoman affairs on making pragmatic and protectionist moves that served to shore up imperial security and calmly reassure the world of Ottoman competency. This spirit is evident across a range of events. In 1880 the Sultan, who was notoriously paranoid about imminent attacks on his life, relocated his official residence from

⁶⁹ A useful general overview of the Hamidian period is contained in a one-hundred-page section of Ezel Kural Shaw, *History of the Ottoman Empire and Modern Turkey* (Cambridge: Cambridge University Press, 1977), II:172–271. See also a more focused consideration of Abdülhamid's concerns and policies on nationalism in Roderic Davison, "Nationalism as an Ottoman Problem and the Ottoman Response," in *Nationalism in a Non-National State*, eds. William Haddad and William Ochsenwald (Columbus: Ohio State University Press, 1977), 25–56.

⁷⁰ There were some minor advancements in railway construction during this period, no more than sixty kilometers in length, all connected to British-led projects in or around Aydın, Tyre, Manisa, Üsküp, and Mersin.

Dolmabahçe Palace to a newly constructed and far more modest palace at the top of a hill on the grounds of an imperial estate at Yıldız.⁷¹ That same year, Abdülhamid ceded management of the İzmit railway to a British firm, agreeing to a twenty-year transfer with the option of taking it back at any time.⁷² This tempered arrangement with the British was belied by the sudden termination of the British exploration of eastern Palestine, presumably out of fear of colonization attempts, in 1881. The Porte also ceded Tunisia to France and Thessaly to Greece in 1881, with the reasonable anticipation of international confrontations on those imperial borders. In 1882, with the local Egyptian government teetering on the edge of a complete financial collapse, the British occupied Alexandria, Cairo, and Suez in order to protect their deep financial interests in the canal, effectively denying the Porte any further control in the region. Sometime around 1880, Abdülhamid appealed directly to Wilhelm I for guidance in reordering the military. Always ready to give an opinion, Bismarck approved, noting that the partnership would provide “influence and informants.”⁷³ Colmar Freiherr von der Goltz (1843–1916), a decorated Prussian soldier, was brought to İstanbul in 1883 for the task, and over the course of twelve years, he managed to shape a generation of brutish Turkish soldiers into modern

⁷¹ İhsan Yücel, *Yıldız Saray: Şale Kasr-ı Hümayunu* (İstanbul: Milli Saraylar Daire Başkanlığı Yayını, 1993). Regarding the Sultan’s paranoia about attack, which had a bearing on both the location of Yıldız and the course of the Baghdad Railway, see the fascinating lambasting of the Sultan by the son of an official in Abdülhamid’s court: George Dorys [pseud.], *The Private Life of the Sultan of Turkey* (New York: D. Appleton, 1901).

⁷² Orhan Conker, *Les Chemins de Fer en Turquie et la Politique Ferroviaire Turque* (Paris: Librairie de Recueil Sirey, 1935), 16.

⁷³ Immo Sievers, *Der europäische Einfluß auf die türkischen Bahnbauten bis 1914* (Pfaffenweiler, Germany: Centaurus, 1991), 14–15.

military men while carefully preventing the modernization from meaning a break of allegiance to the sultan.⁷⁴

While Abdülhamid secured his internal power, Wilhelm I and Bismarck, initially skeptical of the colonial land grab and the so-called “scramble for Africa,” began to reverse the policies of isolationism in extra-European affairs and began a significant and still understudied foray onto the colonial stage. The effort was deeply indebted to the impudent explorer Carl Peters (1856–1918) who, at the ripe age of 28, established the Gesellschaft für Deutsche Kolonisation (Society for German Colonization) in Berlin and forged a unique colonial format that placed an emphasis on entrepreneurship and a deemphasis on civilizing mission.⁷⁵ By 1885, three major colonial conglomerations had

⁷⁴ Goltz was, at least in private, somewhat skeptical as to whether the Ottoman military could in fact be modernized. Handan Nezir Akmeşe has made the following observations on Goltz’s tenure in Turkey: “Goltz’s military doctrines were but part of a broader world-view, which, like that of many of his contemporaries in Germany, was shaped by militarism, nationalism and Social Darwinism. Goltz’s Social Darwinism was reflected in his belief that ‘world history’ was an unending struggle for existence between nations, in which the crucial test of fitness was war.” Regarding his personal view of Abdülhamid and his entourage, Akmeşe offers the following appraisal: “The Stambul Efendi whose father held a well-paid sinecure, rewarded by Sultan [Abdül] Hamid for his faithfulness, and who enjoyed to the fullest the good life, not knowing the struggle for existence, could not be a great leader on the battlefield... As long as Sultan Abdülhamid and the present ruling classes remain at the rudder, one may not speak of the rescue of Turkey.” Handan Nezir Akmeşe, *The Birth of Modern Turkey: The Ottoman Military and the March to World War I* (New York: I. B. Tauris, 2005), 22–23. Von der Goltz also published a fascinating and more prosaic account of the Ottoman empire and the Anatolian interior in his own writings, which were accompanied by the photography of the noted İstanbul photographer Gustave Guillaume Berggren: Colmar Freiherr Von der Goltz, *Anatolische Ausflüge* (Berlin: Schall & Grund, 1896).

⁷⁵ The best synoptic of German colonialism is Sebastian Conrad, *German Colonialism: A Short History* (Cambridge: Cambridge University Press, 2008). Hannah Arendt and Franz Fanon both viewed the colonial project in Africa in the Long Nineteenth Century as a forebear to the Holocaust. Arendt’s picture of Peters is worth bearing in mind in connection with the eventual negative connotations attributed to the German colonizer-settler: “Two new devices for political organization and rule over foreign peoples were discovered during the first decades of imperialism. One was race as a principle of the body politic, and the other bureaucracy as a principle of foreign domination. ... Race was the Boers’ answer to the overwhelming monstrosity of Africa—a whole continent populated and overpopulated by savages—an explanation of the madness which grasped and illuminated them like ‘a flash of lightning in a serene sky:

been established: German East Africa (Tanganyika, Zanzibar, Ruanda-Urundi, Wituland, and the Kionga Triangle), German Southwest Africa (Namibia and a part of Botswana), and German West Africa (Cameroon and Togoland). Colonists simultaneously arrived in the Pacific, forming German New Guinea, which comprises the modern territories of northern Papua New Guinea, the Bismarck Archipelago, the Northern Solomon Islands, Bougainville Island, Nauru, Samoa, and the Marshall, Mariana, and Caroline archipelagos.⁷⁶ A telling depiction of the seminal Berlin West Africa Conference of 1884 in the *Allgemeine Illustrierte Zeitung* [Fig. 1.8] features an attentive and determined array of European officials negotiating the complex diplomatic and economic matters relating to the parceling of Africa. On one side of a conference table, Bismarck sits resolutely, illuminated by a beam of light and commanding the attention of his peers, while Grand Vizier Mehmed Said Pasha (1830–1914), the lone Ottoman delegate, bows his head in frustration as he is ignored by everyone around him. Germany’s railway development in its portions of Africa became crucial to Germany’s consolidation of power, and despite

“Exterminate all the brutes.” This answer resulted in the most terrible massacres in recent history, the Boers’ extermination of Hottentot tribes, the wild murdering by Carl Peters in German Southeast Africa, the decimation of the peaceful Congo population.” She goes on to note: “The superfluous men, ‘the Bohemians of the four continents’ who came rushing down to the Cape, still had much in common with the old adventurers. They too felt ‘Ship me somewhere east of Suez where the best is like the worst, where there aren’t no Ten Commandments, and ‘a man can raise a thirst.’ The difference was not their morality or immorality, but rather that the decision to join this crowd ‘of all nations and colors’ was no longer up to them; that they had not stepped out of society but had been spat out by it; that they were not enterprising beyond the permitted limits of civilization but simply victims without use or function.” With regard specifically to Peters, she writes, “The full impact of the African experience was first realized by leaders of the mob, like Carl Peters, who decided that they too had to belong to a master race. African colonial possessions became the most fertile soil for the flowering of what later was to become the Nazi elite.” Hannah Arendt, *The Origins of Totalitarianism* (San Diego: Harcourt Brace & Jovanovich, 1973), 185, 189, 206 respectively.

⁷⁶ Conrad, *German Colonialism*, 36–65. German Southwest Africa (Namibia), Cameroon, and Togo were incorporated in 1884, German East Africa (Tanzania) in 1891, Kiaochow (Tsingtao) in 1897, and New Guinea and Samoa in 1899.

the many political and geographic differences, the process of building those networks would deeply inform the process in Asia Minor.

Despite the momentous geopolitical ambitions of the German economic and political machine circa 1884, there were also smaller-scale moments of geniality between Germans and Ottomans, which typically happened in the parlors of Berlin and İstanbul. After several years traveling through the Levant and Anatolia, the talented novelist Helene Böhlau (1856–1940) and the architect, phenomenologist, and philosopher Friedrich Arnd (1839–1911) settled in İstanbul, where they immersed themselves in the elite intellectual circles of Pera and where Arnd converted to Islam, adopting the name “Omar al Raschid Bey.”⁷⁷ Karl May’s (1842–1912) 1892 novel *Durch Wüste und Harem* (*Through Desert and Harem*) adapted the popular appeal of the *Thousand and One Nights* into a contemporary German idiom, and his own (sensationalist) travel descriptions in Ottoman lands were followed by as wide an audience as any earlier literature on the region.⁷⁸ In Berlin, diplomats, doctors, and writers, the likes of Basiretçi Ali Efendi (1845–1910), Sadullah Pasha (1838–1891), Ahmed İhsan Tokgöz (1868–1941), and Hüseyin Huli (1861–1894), familiarized Berlin society with the Ottoman empire’s best and brightest.⁷⁹ European tourism in the Ottoman capital began to steadily

⁷⁷ Hans Schwerte, “Böhlau, Helene” *Neue Deutsche Biographie*, vol. 2 (Berlin: Dunckner & Humblot, 1955), 376.

⁷⁸ The orientalist aspects of Karl May’s literature are well studied. The most compelling biography is Helmut Schmiedt, *Karl May oder die Macht der Phantasie* (Munich: C.H. Beck, 2011). Schmiedt downplays the “exoticist” elements of May’s work in favor of a contextualization within Germany literary traditions, emphasizing the role of fantasy more than the geopolitical or philological connections to orientalism.

⁷⁹ A selection of essays about Turkish figures who had an impact on Berlin society can be found in Ingeborg Böer, Ruth Haerkötter, and Petra Kappert, *Türken in Berlin, 1871–1945: Eine Metropole in den Erinnerungen osmanischer und türkischer Zeitzeugen* (New York: Walter de Gruyter, 2002).

increase with the introduction of the proverbial “Orient Express,” the first international passenger railway, in 1883, which in its first seven years of operation actually required a connection via ferry service from the Black Sea rail terminus at Varna.⁸⁰

Meanwhile, because of the Russo-Turkish war and the transition of power at the Porte in 1876, Pressel and Hirsch’s proposal for an Anatolian railway had remained on the shelf. Pressel attempted to revive interest in the project by appealing directly to Abdülhamid in 1883, proposing a multinational financial structure for an inner Anatolian railway to Baghdad. Abdülhamid rejected the proposal and then again rejected it in 1887, for fear that the “hybrid” nature of the financial structure would diffuse the economic influence of European powers on the empire too widely.⁸¹ To be sure, it was not only the Sultan who needed appeasement. European financiers were also extremely skeptical that the Ottomans would be able to sustain the construction of such a significant railway. Pressel sought to mollify such concerns by noting in 1888 that “the Anatolian is no less hard-working than the Italian,” a backhanded compliment that exposes some of the underlying Protestant paternalism of the endeavor.⁸²

Despite his apparent reticence toward Pressel himself, Abdülhamid became increasingly certain that Germany in general (not Britain or France) and Wilhelm II in particular could serve as the empire’s main European ally and that a concession for the

⁸⁰ Harold Heppner, *Der Weg führt über Österreich: Zur Geschichte des Verkehrs- und Nachrichtenwissens von und nach Südosteuropa (18. Jahrhunderts bis zur Gegenwart)* (Vienna: Böhlau, 1996), 136.

⁸¹ McMurray, *Distant Ties*, 21.

⁸² Wilhelm von Pressel, “Das Anatolische Eisenbahnnetz,” *Zeitschrift für Eisenbahnen und Dampfschiffahrt der Österreichisch-ungarischen Monarchie*, 1888, 2. “Die Anatolier sind nicht weniger arbeitsam wie die Italiener, welche man ehemals bei uns allgemein für träge gehalten hat, bis man durch den Augenschein eines Besseren belehrt wurde.” Document is located in DM NL13/41.

Anatolian railway would be the *entrée* through which that relationship could coalesce.⁸³ An assertion by Maybelle Chapman, that Abdülhamid's affinity for Germany was based on a tripartite belief that Germany had 1) no territorial or cultural ambitions "demanding fulfillment at Turkey's expense," 2) no Muslim subjects, and 3) financiers and engineers willing to place railways where the Sultan wanted them, is only partially correct.⁸⁴ When the Sultan began to rejuvenate the project and make arrangements for it to happen in 1888, Germany did, in fact, have Muslim subjects in coastal German East Africa (the capital of which, Bagamoyo, had even been an established Muslim stronghold on the Indian Ocean rim before being brutally colonized by Carl Peters), and thus the supposition that Abdülhamid's duties as Caliph and protector of Muslims would have played a role in his selection of an ally is dubious. Moreover, it seems unlikely that the Sultan failed to recognize that Germany had cultural ambitions, if not territorial ones as well. Those ambitions were simply not packaged the way the British, French, Belgians, Italians and Dutch packaged them.

The historiography of a series of critical events concerning the railway in 1888 suggests that the successful formation of a syndicate for an Anatolian railway by the end of that year was, fundamentally, the design of a constellation of German actors.⁸⁵ These included Kaiser Wilhelm II himself, Bismarck, Pressel, Alfred von Kaulla (1852–1924),

⁸³ McMurray, *Distant Ties*, 23. McMurray's contention that the Sultan liked Pressel is not substantiated and, as already noted, the situation may have actually been the opposite. Regardless, it is unclear whether they ever even had direct contact.

⁸⁴ Maybelle K. Chapman, *Great Britain and the Baghdad Railway* (Menasha, WI: G. Banta, 1948), 18–19. Cited also by McMurray, *Distant Ties*, 21.

⁸⁵ Here I refer primarily to McMurray, *Distant Ties*, as well as Manfred Pohl, *Von Stambul nach Bagdad: Die Geschichte einer berühmten Eisenbahn* (Munich: Piper, 1999).

director of the Private Württemburger Vereinsbank, Georg von Siemens (1839–1901), director of Deutsch Bank and member of the Reichstag, Joseph Maria von Radowitz (1839–1912), the German ambassador in İstanbul, and Otto Kapp von Gülstein (1853–1920), a leading civil engineer at the Frankfurt-based firm Philipp Holzmann GmbH. But sources also indicate an authorial role played by Ottoman counterparts, including Ahmed Tevfik Pasha (1845–1936), the Ottoman ambassador to Berlin and later Foreign Minister, Kâmil Pasha (1833–1913), Grand Vizier, Zihni Pasha (1828–1911), the Minister of Public Works, Ibrahim Edhem Pasha (1819–1893), the influential former Minister of the Interior, Mahmud Şevket Pasha (1856–1913), general and statesman, and naturally, the Sultan himself. Parsing the records to ascertain conceptual (as opposed to financial or scientific) credit for the project nonetheless belies what emerged as a joint endeavor when construction on a new line from İzmit to Ankara (Angora) via Eskişehir began with great fanfare in May of 1889.

When the Sultan rejected Pressel's second multinational financial structure in 1887, Pressel turned to Kaulla, who was also living in İstanbul at the time and overseeing the shipment of weapons for the weapons manufacturer Mäuser & Löwe.⁸⁶ Kaulla returned to Germany and pitched the project to Siemens in March of 1888.⁸⁷ Siemens was personally enthusiastic, but had reservations that stockholders would not be interested in the project, primarily because Bismarckian isolationism was still advocated in elite German circles. Writing directly to Kaulla a few weeks later, Tevfik Pasha indicated that an imperial *irade* had, in principal, sanctioned a Kaulla-Siemens-backed corporation, and

⁸⁶ Jonathan Manzenreiter, *Die Bagdadbahn als Beispiel für die Entstehung des Finanzimperialismus in Europa, 1872–1903* (Bochum, Germany: N. Brockmeyer, 1982), 47.

⁸⁷ McMurray, *Distant Ties*, 22.

the two would be invited to İstanbul when all parties were ready to begin negotiations in earnest.⁸⁸ Siemens, unlike Kaulla, did not think highly of Pressel, who struck him as a naïve and emotional turcophile.⁸⁹ Siemens epitomized the Frankfurt liberal capitalist ideology of the *Deutsche Freisinnige Partei* (DFP) and rejected Pressel's benevolent contention that the railway in Anatolia was for the singular benefit of the Ottoman people. Rather, he emphasized to Kaulla that any support he might offer would be contingent on the rail being an enterprise that, as Jonathan McMurray has characterized it, "employed German workers, used German materials, and benefited German investors."⁹⁰

Distancing themselves ever further from Pressel, Kaulla and Siemens appealed directly to the German Foreign Office for support just a few weeks after Wilhelm II's accession in June 1888, but they received a resolute rejection from Bismarck himself.⁹¹ Undeterred, Siemens officially signed up for the project several weeks later and indicated to the Foreign Office that he, Kaulla, and a new entity to be known as the *Chemin de Fer d'Anatolie* would formally apply for the concession that Tevfik Pasha had already all but

⁸⁸ "En réponse, je viens vous informer que votre demande de concession des chemins de fer de l'Asie mineure ayant été, en principe, acceptée, un Iradé Impérial vous invite à aller à Constantinople afin de vous aboucher à cet effet avec le Ministère des travaux publics de l'Empire." Tevfik Pasha to Alfred Kaulla, Berlin, April 26, 1888, Ba 8119f/8106, 336.

⁸⁹ McMurray, *Distant Ties*, 20.

⁹⁰ *Ibid.*, 23.

⁹¹ "German entrepreneurs assume a risk in capital investments in railway construction in Anatolia—a risk which lies, first, in the difficulties encountered in the enforcement of the law in the East, and, second, in the increase of such difficulties through war or other complications. The danger involved therein for German entrepreneurs is upon the protection of the German empire against eventualities connected with precarious enterprise in foreign countries." Edward Meade Earle, *Turkey, the Great Powers, and the Bagdad Railway: A Study in Imperialism* (New York: Russell & Russell, 1996 [orig. New York: Macmillan, 1923]), 41. Cited also by McMurray, *Distant Ties*, 22.

guaranteed them.⁹² Bismarck, likely comforted by the fact that a name like Siemens would formally back the endeavor, swiftly pivoted his position in favor of the project, and an application for the concession was formally submitted to the Porte on September 2nd.⁹³ A month later the concession was signed, and in March 1889 the *Chemin de Fer Ottoman d'Anatolie* established its headquarters in İstanbul. Wilhelm von Pressel had no official role in the organization and remained embittered by the exclusion until his death.⁹⁴

McMurray and others have characterized the events of 1888 as an affront to Pressel and a symbol of how the capitalist machine had grown into one without qualms about trampling and co-opting neither the intellectual property of upstart entrepreneurs nor benevolent developmentalism. But this is to a large degree a revisionist argument that does not stand up to the facts. When Midhat Bey commissioned Pressel for a study of a railway in the interior of the empire, Pressel, like Chesney before him, focused his attention on the latitudinal band of land connecting the Mediterranean to the Persian Gulf. To be sure, it was tacitly understood that the railway would ultimately need to connect to İstanbul, but it was uncertain how or where, particularly given the challenges posed by the Taurus and Amanus mountain ranges that roughly divided the empire's Turkish and Arab provinces. Pressel did not stress the town of Eskişehir (c. 20,000 residents in 1890) as a key juncture of the 486-kilometer railway as it stretched onward from İstanbul (c. 1 million residents in 1890) and İzmit (c. 19,000 residents in 1890), and he most certainly

⁹² Ba 8119f/8106.

⁹³ Ba 8119f/8107.

⁹⁴ McMurray, *Distant Ties*, 23.

did not recommend out-of-the-way Ankara (c. 27,000 residents in 1890) as a terminus.⁹⁵ Rather, this route was conceived by Abdülhamid and surveyed by the Anatolian Railway syndicate, not Pressel, as one that would bring the profitable trade of grain, wool, and carpets closer to the metropolitan fold while also creating a stronger link to the empire's Turkish core.

The historiography has also stressed that the Anatolian Railways alone occupied the attention of the Porte between the years of 1888 and 1898 and has created the impression that the Sultan was transfixed only by the penetration of the Anatolian core. As a matter of fact, Abdülhamid reenergized railway development in the Balkan powder keg, issuing concessions for a 219-kilometer line connecting Thessaloniki and Monastir to a German syndicate in 1890 and a 508-kilometer line connecting Dedeağac and Thessaloniki to a French syndicate in 1892. In 1890, the European railway terminus at Sirkeci, designed by the German architect August Jachmund, was inaugurated, providing a symbolic entryway to the city from Europe and a useful connection to all points west.⁹⁶

Secondary sources indicate that the eventual successful realization of the Jaffa-Jerusalem line further south was the product of an intense three-year lobby of the Porte by Joseph Navon (1858–1934), a Jewish-Ottoman entrepreneur living in Jerusalem who, along with his cousin Joseph Amzalak (1860–1944), the Greek Lebanese engineer

⁹⁵ Population statistics are interpolated from the historical demographic statistics of the *Almanack de Gotha und gothaischer Hofkalender* (Berlin: Martin Breslauer, 1913). The importance that the railway's placement in Ankara, just a small city in the first quarter of the twentieth century, held for Atatürk's selection of that city as the capital of the Republic may still be widely underestimated.

⁹⁶ Despite Jachmund's important projects for İstanbul, rather little is known about his biography. He did teach until his death (precise date unknown) at İstanbul University, where Kemaleddin Bey, a pioneer of the Turkish national movement in architecture, was a student. This relationship and Jachmund's work are considered at greater length in Chapter Five.

George Franjieh (fl. 1880-1900), and the Swiss banker Johannes Frutiger (1836–1899), surveyed the route in 1885.⁹⁷ However, British consular records indicate that the Navon lobby was simply actualizing the ideas set forth by Lutfi Bey, an Egyptian statesman, before him.⁹⁸ Regardless, on October 28, 1888, less than four weeks after signing the agreement for the Anatolian Railway, the Porte signed an agreement for the railway's construction and then established the *Société du Chemin de Fer Ottoman de Jaffa à Jérusalem et Prolongements*.⁹⁹ Navon encountered significant difficulties funding the line over the next two years and traveled to Europe to curry support, finding the French to be the most responsive but with German entities contributing some additional support. Theodor Herzl (1860–1904), the Austro-Hungarian essayist and “Father” of the Zionist movement, was among those approached by Navon. Herzl declined to get involved, claiming that the “wretched little line” was inadequate for large-scale colonization needs.¹⁰⁰ The Jewish press was not too keen on the project either. The Hebrew newspaper *Havatzelet* opined it to be unfortunate that no Jewish financiers had been found, while *The Jewish Chronicle* feared that the Christian financiers would take advantage of Jewish interests.¹⁰¹

Construction on the Jaffa-Jerusalem line nonetheless broke ground in March 1890, just a few weeks before construction began on the İzmit-Ankara line. For the Jaffa-

⁹⁷ Anthony S. Travis, *On Chariots with Horses of Fire and Iron* (Jerusalem: Magnes Press, 2009), 27.

⁹⁸ Ba R901/15067, 4b.

⁹⁹ Ibid.

¹⁰⁰ Paul Cotterell, *The Railways of Palestine and Israel* (Abingdon, UK: Taurer, 1984), 10.

¹⁰¹ Travis, *On Chariots*, 31; “Jaffa Jerusalem Railway,” *Havatzelet*, January 1, 1892, 2–3.

Jerusalem line, a skilled labor pool of engineers was drawn from Switzerland, Poland, Italy, and Austria-Hungary, while unskilled labor was executed by laborers brought from as far away as Sudan and Algeria, in addition to the more proximate Palestinian and Egyptian Arab populations.¹⁰² For the İzmit-Ankara line, German engineers led by Kapp von Gülstein and his colleagues from Philipp Holzmann supervised the unskilled labor of local Turks, while mainly Armenians, Italians, and Greeks were hired for semi-skilled labor such as stonemasonry and woodworking.¹⁰³ With tens of thousands of various nationals working on the rails by Fall of 1889, there was no better time to host Kaiser Wilhelm and Empress Auguste Viktoria (1858–1921) for a diplomatic visit.

The Kaiser's visit to the empire was lavish. As the royal yacht sailed through the narrowest part of the Bosphorous, a welcome involving 101 rounds of ammunition and a booming rendition of the German imperial anthem echoed across the straits.¹⁰⁴ The Turkish press downplayed the strategic nature of the visit, preferring to depict it as a purely touristic experience:

The principal feature in the moral aspects of the Emperor William's visit is its distinctly pleasurable character. His Majesty comes to satisfy a perfectly intelligible desire to see this picturesque city, and to experience the charm of its beauty, of its Oriental character, and all of the historical associations which attach to it. The present reign, so peaceful and so beneficent in its plan and purpose, makes the moment singularly propitious for such a visit. The peace of the world and the well-being of their respective subjects are the common objects of the two Sovereigns who meet to-day; so that the highest desire of either Sovereigns inspire, and renders it easy to seal anew, in personal intercourse, the old bond of friendship between the two Imperial Houses. To all classes of the Ottoman population, the visit is a matter of unalloyed pleasure, by the visible proof it gives of the

¹⁰² Ibid., 45.

¹⁰³ This division of labor can be found in a broad swath of both primary and secondary materials, for example, McMurray, *Distant Ties*, 93.

¹⁰⁴ "The German Emperor's Visit to Constantinople," *The Levant Herald and Eastern Express*, November 9, 1889. Located in GSPK BPH Rep. 53 F IIIId Nr. 2A.

interest of a great European Monarch in the concerns of their country, and of the respect and regard in which he holds their beloved Sovereign.¹⁰⁵

Indeed, the visit was characterized by a great deal of pomp and circumstance, but Sean McMeekin's portrayal of the visit as one marked by the curious caiques and the hedonism of the harem takes the press accounts at their word and embellishes an already florid chronicle of events.¹⁰⁶ The four-day schedule was actually a serious itinerary of political maneuvering on behalf of the Sultan. Covering everything from military affairs and German economic growth in İstanbul to Zionist matters and Christian missionary interests, events that appeared to "denote" pleasure often had serious agendas as their subtexts. The guest list for the great banquet at Yıldız Palace reads like a political playbook, indicating who, precisely, was considered crucial to the burgeoning alliance and who, especially among foreign diplomats, were not.¹⁰⁷

In March 1890, Bismarck was forced out of office, and to a large extent so too were the traces of apprehension in foreign affairs that had been the hallmark of his power. With a healthy dose of more constructive skepticism, Von der Goltz reacted to the Sultan's desire to be popular with the Hohenzollern, noting:

The people, and the government [of Turkey] have to strive for an Islamic culture-state that no longer sees its reason for existence as new conquests or in the obstinate holdings of older territorial gains, but rather in the prosperity of the earth where the Ottomans have the undisputed predominance and right of possession. Also, in the new form, Turkey, as the supreme power of Islam, would continue to have a meaningful political role while her distance from European trade could only do her good.¹⁰⁸

¹⁰⁵ Ibid.

¹⁰⁶ For example, Sean McMeekin, *The Berlin-Baghdad Express: The Ottoman Empire and Germany's Bid for World Power* (London: Penguin, 2010), 7–12.

¹⁰⁷ "The German Emperor's Visit."

¹⁰⁸ Freiherr Colmar von der Goltz, *Denkwürdigkeiten* (Berlin: E.S. Mittler, 1932), 133. Cited by McMurray, *Distant Ties*, 21.

The natural “prosperity” of the “earth” of even a shrunken Ottoman empire was beyond question, even to those who uttered the “sick man of Europe” epigram, and a number of auspicious events in the following years supported the notion of a land resuscitating itself. To express this in *Realpolitik* terms, German newspapers began describing the immense fecundity of Ottoman Palestine, in particular, and instructed their readers on the complicated steps of land acquisition in the Ottoman empire, part Zionist and part touristic reportage.¹⁰⁹ To this end, interested parties established the Deutsche Palästina- und Orient-Gesellschaft GmbH in 1896 and the Deutsche Palästina Bank in 1897.¹¹⁰ The establishment of trade and shipping agencies, with Berk, Püttmann & Co. a leader among them, flourished from 1894 onwards, managing an exponential growth in the trade of commercial and raw goods between the Port of Hamburg and ports in the Mediterranean and the Persian Gulf.¹¹¹

Yet another concession for a railway connection from Haifa to inner Palestine was granted in 1891, this time to the British-Lebanese partnership of John Robert Pilling and Joseph Elias.¹¹² In 1892, the Jaffa-Jerusalem [**Fig. 1.9**] and İzmit-Eskişehir lines were both completed, to the delight of the Ottoman authorities and foreign investors. Although

¹⁰⁹ See, for example, Ludwig Von Hirschfeld, “Heber das Grundeigenthum in der Türkei,” *Mainzer Allgemeine Zeitung*, December 25, 1892. Located in Ba R901/30181.

¹¹⁰ Nachum Gross, “Die Deutsche Palästina-Bank 1871–1914: Ein Forschungsfragment,” *Zeitschrift für Unternehmensgeschichte*, vol. 33, no. 3 (1988), 149-77.

¹¹¹ Max Freiherr von Oppenheim, *Vom Mittelmeer zum Persischen Golf durch den Haurān, die Syrische Wüste und Mesopotamien* (Berlin: D. Reimer, 1900), 2:251.

¹¹² David Kushner, “The Haifa Damascus Railway: The British Phase, 1890–1902,” in *Decision Making and Change in the Ottoman Empire*, ed. Caesar Farah (Kirkville: Thomas Jefferson University Press at Northeast Missouri State University, 1993), 193; James Nicholson, *The Hejaz Railway* (London: Stacey International, 2005), 50.

it was focused on the Ottoman “new literature” genre, Ahmet İhsan Tokgöz and Rezaizade Mahmud Ekrem’s (1847–1914) progressive journal *Servet-i Fünun*, established in 1891, also took particular interest in the modernizing landscape of the railway, celebrating the inauguration of the İzmit-Eskişehir line in several sequential accounts. [Fig. 1.10] Shortly thereafter, the Porte extended another concession to the Deutsche Bank-Holzmann team for an additional 445-kilometer line to the city of Konya (c. 25,000 residents in 1890) via Afyonkarahisar (c. 15,000 residents in 1890).¹¹³ On June 15, 1894, Kaulla would have watched proudly as the first steam locomotive left Thessaloniki for Monastir on the newly completed track. Amidst widespread devastation wrought by a massive earthquake on the fault line running through İstanbul, the Marmara, and northwest Anatolia on June 15, 1894, there was an affirmation of faith in German expertise, as the railway and its bridges, tunnels, and stations went largely unscathed.¹¹⁴ By the end of July 1896, the Anatolian Railway, along with a branch line to the manufacturing town Kütahya, was complete.

While veritable progress along the railways’ tracks was palpable, less assuring events were happening elsewhere. The same Deutsche Bank-Holzmann team that was building the railways in Anatolia was granted the concession for the construction of a railway in German East Africa (the “Centralbahn” connecting the port of Dar-es-Salaam with the colonial interior), and Holzmann’s archives reveal myriad ways in which the lines in Africa and in Turkey were conceived interchangeably in terms of both their

¹¹³ Population statistics are again interpolated from the historical demographic statistics of the *Almanack de Gotha und gothaischer Hofkalender* (Berlin: Martin Breslauer, 1913).

¹¹⁴ Amit Bein, “The Istanbul Earthquake of 1894 and Science in the Late Ottoman Empire,” *Middle Eastern Studies* 44, no. 6 (2008): 909–24.

technological and administrative challenges.¹¹⁵ [Fig. 1.11] In Spring of 1897, the railways helped mobilize the Ottoman military for the first time, bringing troops to İzmir, from which they swiftly proceeded to Crete to suppress a Greek rebellion.¹¹⁶ More intangible, but certainly significant, was the steady mobilization of the intellectual and secular elites of Ottoman society who, despite the rapid reforms and modernization symbolized by the railway, viewed the Sultan's rule as increasingly autocratic and oppressive. Time, like money, was on loan. Damad Ferid Pasha (1853–1923), a progressive Serbian-Ottoman statesman, bravely wrote a captious open letter to Abdülhamid in January 1900 after being falsely accused of treasonous plots against the Sultan's life. The letter, which summarized his frustrations, was published in the French and British press:

As for your Majesty, like certain despotic and egotist Monarchs, you regulate your conduct with the baneful saying of Louis XV, 'Après moi le Déluge.' You think of nothing but your own person: you trample on all rights and humanitarian sentiments. The happiness of your people is the last of your cares, and twenty-four millions of men are sacrificed to your egotism... You indulge in unreasonable actions and wasteful expenditure, such as the creations of grades and decorations unseen in any other state... Our country is rich, capable of prosperity and of supporting in comfort twenty times its present population. But, alas! a gang of robbers has seized it and has barred the road to wealth and treasure.¹¹⁷

The railway, however, posed a unique quandary for the growing Young Turk movement, of which Damad Ferid Pasha was a part. On the one hand, it was not considered a “wasteful” expenditure in the same way “gratifications” to local governors, lavish festivals, and ostentatious monuments were. In fact, the railways were seen by the vast majority of the Turkish public as a means to opening up the prosperity Damad Ferid

¹¹⁵ Özyüksel, *Osmanlı-Alman İlişkilerinin*, 101–22.

¹¹⁶ Sievers, *Der europäische Einfluß*, 33.

¹¹⁷ “Mahmoud Pacha and the Sultan,” *The Standard*, January 23, 1900. Located in AA R14.131.

Pasha mentioned. But the ambiguously colonial benefits it proffered German capitalists (the “bandits”) were also worrisome and, in many senses, accelerated a factious political climate based upon ideology, not nationality—one that allied the Kaiser with the Sultan as much as it did the urban intellectual with the overworked and underpaid railway laborer.

1.6 German Expansion and Ottoman Autonomy in the Later Hamidian Years, 1897–1908

By the time of the Kaiser’s second visit to the Ottoman empire in October 1898, the international press was increasingly depicting the German-Turkish venture as unambiguously colonial. This visit, significantly longer than the one nine years earlier, would entail hands-on business, of which the railway along with its universe of economic and political meaning was the main—as opposed to inferred—object. In an article entitled “German Anatolia: Conquest by Railway,” *The Pall Mall Gazette* characterized the meeting as an inevitable and “practical” geopolitical marriage:

The German programme [sic] in its entirety is certainly calculated to raise a smile, but at the same time what the Germans are doing is highly practical. If only a beginning has been made, it is quite recently that Anatolia has become penetrable, and into the newly opened region the Germans are now the first to press their way as pioneers of Western commerce. Will these pioneers ultimately become an invasion of colonists? The line of conquest is plain—the railroad, the trader, the settler. Already the railroad is a German strong point. There are now nearly 1,000 miles of railroad in Asia Minor, the easternmost terminus at Angora [sic] fairly in the heart of the country. The railroad represents direct German influence. For the Mahomedan Turk, a railway is a practically unmanageable invention. Initial difficulties attend the working of a railroad by officials who must attend to their devotions when the muezzin announces the hour of prayer from a minaret; but this is of little importance as the stiff formalities of El Islam are falling considerably into abeyance in many provinces of the Empire. It is not, however, so easy to get over the fact that the ordinary Turk is a rough bungling fellow whose heart is better than his head, by

no means to be trusted with the management of a locomotive, or able to understand either punctuality or the necessity of giving his attention to routine duties.¹¹⁸

The visit began on October 17 in İstanbul, where the Kaiser and Empress were greeted with the familiar regal salute on the Bosphorus. They then proceeded to Yıldız, where the Sultan had not only refurbished the entire palace in anticipation of the visit, but had also commissioned the construction of a new wing where the royal couple would sleep: the Merasim kiosk.¹¹⁹ [Fig. 1.12] After three days of intense conversations, they were joined by Siemens himself and traveled the railways for the first time, ferrying to Haydarpaşa and proceeding sixty-four kilometers to Hereke, where they were proudly greeted at a kiosk picturesquely situated on the Marmara and had been prefabricated at Yıldız and installed at Hereke in just one day. [Fig 1.13] They toured the Hereke facility and were introduced to the process behind the production of Ottoman carpets and fabrics.¹²⁰

From there they returned to İstanbul and reboarded the imperial yacht to Palestine, arriving at the port of Haifa on October 25.¹²¹ For the next eight days, the Kaiser and the empress toured Jerusalem, where an elaborate tent camp was built for the royal pair and their entourage, and the Palestinian interior, where they met with Theodor

¹¹⁸ “German Anatolia: Conquest by Railway,” *Pall Mall Gazette*, October 18, 1898. Located in AA R13.456.

¹¹⁹ İhsan Yücel, *Yıldız Sarayı*, 61–63.

¹²⁰ Yaşar Yılmaz, Mehmet Kenan Kaya, Sara Boynak, and Vahide Gezgör, *Milli Saraylar Koleksiyonu’nda Hereke Dokumaları ve Halıları* (İstanbul: TBMM Milli Saraylar Daire Başkanlığı Yayını, 1999), 10–37. The authors inaccurately state that the visit took place in 1894, when in fact it occurred in 1898.

¹²¹ It is said that the Ottoman authorities in Palestine drew upon the design skills of a local American to properly outfit tents for the imperial entourage. See Rico Grimm, “Kaiser Wilhelm II. in Jerusalem. Pilgerfahrt mit Prunk und Pomp,” *Der Spiegel* (December 7, 2012), specifically the caption to image 6.

Herzl and the acclaimed orientalist painter and architect Gustav Bauernfeind (1848–1904) as well as numerous leaders of German temples, churches, colonies, and businesses in the region. [Fig 1.14] On November 2nd, the royal pair boarded the newly completed Haifa railway and upon their arrival there set sail for Beirut.¹²² In Lebanon, the Kaiser and Empress visited the Temple of Baalbek (Heliopolis) where, as was customary, lambs were slaughtered in their honor. [Fig. 1.15] They proceeded to Syria, where they visited, among others locations, the Great Mosque of Damascus and the Tomb of Saladin.¹²³ Plaques in Turkish and in German were placed side by side at several of the locations to commemorate the visits. The royal party returned to Beirut a few days later, after more than a month of touring Ottoman lands, and returned to Berlin.

Unsurprisingly, German-Turkish railway activity flourished in the wake of the Kaiser’s visit, which both the Porte and Berlin saw as an immense success. In January 1899, German consular records began to repeatedly tout the railway as a formulator of Turkish “moral connectivity,” stressing the consuls’ personal belief that the project was definitely not colonial.¹²⁴ A commonly overlooked event is the Germans’ takeover of the İzmir-Aydın railway from the British in April 1899, just days before the Sultan formally

¹²² For the full itinerary and an in-depth study of the Kaiser’s trip see Thomas Hartmut Benner, *Die Strahlen der Krone: Die religiöse Dimension des Kaisertums unter Wilhelm II: Vor dem Hintergrund der Orientreise 1898* (Marburg, Germany: Tectum, 2001), 175–77.

¹²³ The Kaiser apparently had a penchant for embarrassing himself with bombastic declarations of Muslim-Christian friendship, which several aides found strange. Many of the Kaiser’s secretaries and biographers rewrote his words post facto so that they did not sound so awkward, but one such example reported by Benner is: “Der Islam und der christliche Herrscher eines sich christlich nennenden Reiches haben Freundschaft miteinander geschlossen” (Islam and the Christian ruler of an empire whose [subjects] call themselves Christian herein make friends with one another; Benner, *Die Strahlen der Krone*, 325).

¹²⁴ AA R13.457, 47.

transferred the management of port activities at Haydarpaşa to the Anatolian Railway Company, creating the Société du Port de Haidar-Pacha.¹²⁵

But the crown jewel of the strengthened alliance was the concession for a new railway line to extend from Konya to Baghdad and, presumably, onward to the Persian Gulf. Of course, this was the main ambition for the Anatolian railway from the outset, but it was with the delivery of a formal preconcession from the Porte to Siemens for the Baghdad Railway project on November 26, 1899 (marking, if not coincidentally, the first anniversary of the end of the Kaiser's second journey), that the fruit of more than three decades of speculation would emerge from the realm of fantasy into the realm of cold hard steel.¹²⁶ Abdülhamid noted:

The Baghdad railroad will revive the old trade route between Europe and India. If this line is extended so that communication is established with Syria and Beirut, and Alexandria and Haifa, a new trade route will emerge. This route not only will bring great economic benefit to our empire but also will be very important from the military point of view, as it will consolidate our power [in those lands.]¹²⁷

As momentous as the introduction of the *kara vapur* (black ferry) had been to European Turkey, Palestine, and northeastern and central Anatolia, the penetration of the Cilician Plain, Syria, and Mesopotamia gripped both the Turkish and German psyche as something more: a teleological necessity.¹²⁸ It was in this concession that the

¹²⁵ "Zur Uebernahme der Bahnlinie Smyrna-Aidin durch die Anatolische Eisenbahn-Gesellschaft," *Konstantinopler Sonderblatt*, April 12, 1899. Located in Ba R901/15068, 53.

¹²⁶ Pohl, *Von Stambul nach Bagdad*, 101.

¹²⁷ As quoted and translated in Zeynep Çelik, *Empire, Architecture in the City* (Seattle: University of Washington Press, 2008), 29.

¹²⁸ McMurray, *Distant Ties*, 56. *Kara vapur* literally means "black ferry" in Turkish and was a popular term for the locomotive in its earliest days in the Ottoman empire. This is a good example of the stopgap nature of the Turkish language's adaptation of foreign terms, particularly technological ones: new terms were made through the creative usage of existing terms, typically

topographical and geographical knowledge produced by centuries of European explorers, the life work of Chesney and Pressel after them, and the ambitions of a twentieth century Sultan, coalesced. It was here that the Atlantic would meet the Indian Ocean and the cradle of civilization would meet the modern age. For their part, the Ottoman signatories stipulated an annex (#2) to the agreement that had the German parties explicitly promise that no part of the line would be “colonized,” even if that term was not clearly defined.¹²⁹ To emphasize the friendly, co-equal nature of the collaboration, Kaiser Wilhelm even commissioned a fountain to be designed and built in Berlin, shipped to İstanbul, and erected at the Hippodrome, where it was unveiled in January 1901.

Trusting that the need for the Anatolian Railway would be understood as a self-evident truth in the Ottoman press, one İstanbul gazetteer explained:

It is futile to discuss the benefits of the railways as their contribution to the growth of every country in our days and in all aspects are proven a thousand times over. The difference in the welfare between the countries with advanced railway lines and those which are simply trying to improve the older roads is adequate enough evidence to prove the necessity of increasing railway lines and further discussion on this matter is useless.¹³⁰

Within the Ottoman empire, however, and certainly within the Islamic world, the excitement of a train reaching Baghdad was soon eclipsed by the excitement of a train

an adjective combined with a noun adapted from French if there was no proximate word in Turkish. The word for railway in Turkish is *demiryolu*, which literally means “road of iron.”

¹²⁹ NA FO 406/26, 31.

¹³⁰ DM NL13II/31. This file contains a newspaper clipping dated 1898. The paper is unfortunately cropped in such a way that the newspaper’s name is not visible. The original text reads:

بر مملكتك ترفیسات مادیه و معنویه سبینك ابله بکلری خدمت هرکون بیک دلائل ایله واصل مرتبه ثبوت او لمقده بولیمقیسه بوباده سوز سولیمک بی لزوم کبی کورینور، شمندوفر خطوطی مکمل اولان مملکتقر ایله هنوز خطوط مذکور هبی اروسنده هیدرلو ترفیاکجه کوریلن فرق و حاوت دخی شمندوفر اراک کندیجه جو غاسلی لارم کله جکی حقیقتی نظر مهام شضاسانده اثبات ایجون دلائل مجسمه اولمق اوزر هکولکده بولندایندن بوجهت دخی سوائف مطیو عاتده شمندوفر لک لزونه دائر سوز سولیمکدن استغنا حاصل ایتدبرر.

reaching an even more symbolic destination: Mecca. Invigorated by the successes of the foreign-led railways, Abdülhamid gave his blessing in 1900 to the so-called Hejaz Railway, which would facilitate a rail connection to the holy pilgrimage site in distant Arabia. The history of the Hejaz Railway is complicated in its economic and political structures, not to mention the sheer logistical difficulties posed by a railway that was to be constructed across one of the least populated and harshest parts of the empire. But one thing is clear: for all of his shortcomings, Abdülhamid took his role as Caliph seriously when it came to the Hejaz railway, wasting little time to place the best technological resources at the empire's disposal in the service of a modernized pilgrimage for the world's Muslims. Moreover, because of its sacred nature, the railway would be engineered and constructed as autonomously as possible.

Possibly building on Zimpel's proposal to connect Mecca to the Red Sea, the Indian publicist and editor Muhammad Insha Allah (b. 1870) staked a fervent claim over the first decade of the twentieth century to be the originator of the idea of a railway connecting Damascus in the north and San'a in Yemen with the holy cities of Mecca and Medina.¹³¹ William Ochsenwald and Murat Özyüksel have both given credence to this claim, noting Insha Allah's profuse correspondence with major newspapers of the Arab lands and İstanbul to promote his exegeses on the topic. His own newspapers, *al-Wakil* in Amritsar and *al-Watan* in Lahore, were emphatically pan-Islamic, and both appealed to their readerships for donations that would be collected by Insha Allah himself for a Hejaz

¹³¹ William Ochsenwald, *The Hijaz Railroad* (Charlottesville: University Press of Virginia, 1980), 22, 71. Other leading sources on the Hejaz Railway include Sayyid Muhammad Diqin, *Sikkah Hadid al-Hijaz al-Hamidiyyah: Dirasah Watha'iqiyyah* (Cairo: Matba'ah al-Jabalawi, 1985); Fiedler, *Der Bedeutungswandel*; Ufuk Gülsoy, *Hicaz Demiryolu* (İstanbul: Eren, 1994); Nicholson, *Hejaz Railway*; Murat Özyüksel, *Hicaz Demiryolu* (İstanbul: Türkiye Ekonomik ve Toplumsal Tarih Vakfı, 2000); Richard Turret, *Hedjaz Railway* (Abingdon, UK: Turret, 1989).

railway project in the late 1890s. Whether from allegiance or obligation, Insha Allah maintained that his loyalty remained to the government of India and effectively to the British crown, and that his interest in developing infrastructure for a foreign government was purely an act of Muslim piety.¹³² In fact, Insha Allah was deeply critical of the Porte, publicly stating that its foreign policy record indicated that it had effectively become a service state for Germany.¹³³ But the alternative—to *not* build the railroad—would also have geopolitical implications. Overland travel within the Hejaz for the pilgrimage had greatly decreased since the completion of the Suez Canal, and many pilgrims now traveled to Mecca by sea, disembarking at the Port of Jeddah.¹³⁴

James Nicholson has posited that the Sultan was encouraged to pursue the project by people closer to him than Insha Allah, including von der Goltz and Ahmad İzzat al-Abed Pasha (1849–1924), a notable Damascene and private advisor to the Sultan.¹³⁵ Syed Tanvir Wasti has added to that list Osman Nuri Pasha (1832–1900), Minister of War, and General Ahmed Muhtar Pasha (1839–1919).¹³⁶ The Sultan’s publicly stated aims for the

¹³² Jacob M. Landau, *The Hejaz Railway and the Muslim Pilgrimage: A Case of Ottoman Political Propaganda* (Detroit: Wayne State University Press, 1971). Landau has translated the entirety of Insha Allah’s early texts on the Hejaz Railway, and they always stress the pious ambitions of his campaign, with no mention of the Porte or the British Crown.

¹³³ Ochsenwald, *Hijaz Railroad*, 71.

¹³⁴ Nicholson, *Hejaz Railway*, 2–17. Here Nicholson describes some of the pilgrimage’s customs and patterns immediately prior to the introduction of the railway.

¹³⁵ İzzat Pasha played a multi-faceted and largely unsung role in the construction of the railway. See Philip S. Khoury, *Urban Notable and Arab Nationalism: The Politics of Damascus, 1860–1920* (Cambridge: Cambridge University Press, 2003), 38–39. He also was instrumental in the construction of telegraph lines connecting the Levant and north Africa. See also Syed Tanvir Wasti, “Muhammad Inshaullah and the Hijaz Railway,” *Middle Eastern Studies* 34, no. 2, 65. Wasti refutes the 1905 assertion of the Alexandria newspaper *Spectator* that von der Goltz had supplied Abdülhamid with the idea for the Hejaz Railway.

¹³⁶ Wasti, “Muhammad Inshaullah,” 60–72.

project, which would weave “the motherland from four corners with nets of iron,” were threefold: 1) to facilitate the pilgrimage, 2) to maintain the sovereignty of the Ottoman state, and 3) to foster pan-Islamic unity and education.¹³⁷ Regardless of who conceived the project or whether it was, more likely, an organic development, the Ottoman Council of Ministers took up the issue of a railway in August 1898. Bursalı Mehmet Tahir Bey (1861–1925), editor of the journal *Malûmat*, also had great personal interest in the project and became the primary news source for its developments.¹³⁸

On May 2, 1900, Abdülhamid issued an imperial *irade* asking the empire’s Muslims for contributions to the railway, advertising this through dailies like *Malûmat* and *Sabah*.¹³⁹ By the summer of 1903, with money growing ever tighter, the Sultan issued an amplified request of “suggested donations” from every Muslim in the empire.¹⁴⁰ Although less significant, overtures were also made to extranational Muslims as well as the Christians, Jews, and Druze peoples who stood to immediately benefit, economically, from the railway’s construction in Syria and Transjordan.¹⁴¹ By 1910 Insha Allah, who remained the most vital supporter of the cause in India, had collected approximately 6,500 British Pounds which he gave directly to the Porte.¹⁴² The Shah of Iran contributed 50,000 Ottoman lira, the Emir of Bukhara 400 francs, the Emir of

¹³⁷ Ibid., 60.

¹³⁸ Ibid., 65.

¹³⁹ Nicholson, *Hejaz Railway*, 12. The *Sabah* article (“The Hedjaz Railway,” November 10, 1902) is located in NA FO 78/5452, 123.

¹⁴⁰ NA FO 78/5452, 123.

¹⁴¹ Ochsenwald, *Hijaz Railroad*, 67–70.

¹⁴² Ibid., 71.

Kuwait 500 Ottoman lira, the Sultan of Al Mukalla in the Yemen 20,000 rupees, the Muslims of Singapore 4,000 pounds sterling, and the Muslims of India an additional 5,000 pounds.¹⁴³ Supporters were issued medals as symbols of the Porte's appreciation, inscribed with a range of images of locomotives juxtaposed with the *tuğra* (the imperial emblem). [Fig. 1.16] Meanwhile, German engineers marked the railway's construction with commemorative, inscribed sections of railway gauges. [Fig. 1.17] Medals, not dissimilar in format to those produced for the Hejaz Railway, would also later be produced to commemorate major feats of engineering in the construction of the Baghdad Railway, such as the completion of the tunneling in the Taurus Mountain range. [Fig 1.18] Although fully aware that the necessary funds were not yet in place and would need to continue to flow in, Abdülhamid's Hejaz Railway appointees broke ground in Damascus on September 1, 1900.¹⁴⁴ Commemorative objects celebrating the German-Ottoman partnership, such as a pill box depicting Abdülaziz, Wilhelm and the Grand Vizier [Fig. 1.19] already had precedent in earlier years, but souvenirs, such as matching figurines of Abdülhamid [Fig. 1.20] and Wilhelm [Fig. 1.21], proliferated exponentially with the construction of the Baghdad Railway.

The Sultan and İzzat Pasha organized a binary division of labor. A central office in İstanbul managed donations, the purchase of (primarily German) supplies from abroad, and general fiscal management. A central office in Damascus managed everything else, including design, engineering, construction, and labor management.¹⁴⁵ The Porte did its

¹⁴³ These sums are given in Ahmed Ibrahim Abushuok, "The Hijaz Railway: Motives, Results and Impacts" [translation from Arabic], *Islam in Asia* 6, no. 1 (2009) 15.

¹⁴⁴ Nicholson, *Hejaz Railway*, 18.

¹⁴⁵ Ochsenwald, *Hijaz Railroad*, 26.

very best to staff the railway with an Ottoman workforce from top to bottom, but this quickly proved impracticable. The chief of staff of the second division of the army, Mehmed Ali Pasha, was placed in charge of construction in Damascus in June of 1900, along with a paltry staff of six engineers.¹⁴⁶ Within only a few months it was clear that some foreign expertise was needed, and in November an Italian by the name of Labella arrived as a lead engineer, with a salary of 20,000 francs per annum, which was well above the salaries of his peers. Kapp von Gülstein of the Anatolian Railway syndicate was enlisted as an inspector and was asked to report to the İstanbul office, not Damascus.¹⁴⁷ The first survey was delegated to another officer, Ali Rida al-Rikabi (1868–1943), and Ahmet Muthar Cilli (1871–1958), an army engineer.¹⁴⁸

The results of their work were, by all accounts, disastrous. Mehmed Ali Pasha was rapidly brought up on charges of mistreating workers (he apparently barely fed them), and the surveys proved largely useless just twenty kilometers into the construction.¹⁴⁹ İzzat Pasha's demand for daily telegram reports on the railway's progress did not help things much. Early in 1901, İzzat Pasha reassigned Kazım Pasha (1839–1936), another military general, as head of the Damascus office.¹⁵⁰ Kazım Pasha had greater experience with Western military technology and, feeling intense pressure from

¹⁴⁶ Ibid.

¹⁴⁷ Ibid., 28. This was a strategic way to manage the extranational labor, insofar as it allowed the Damascus office a certain amount of tacit authority even though decisions and suggestions influenced by Meißner and other European parties were often routed back to Damascus through the İstanbul office.

¹⁴⁸ Ibid.

¹⁴⁹ Ibid., 29.

¹⁵⁰ Ibid. See also Emrah Çetin, "Türk Basınına Göre Hicaz Demiryolu (1900-1918)," *International Journal of History*, Middle East special issue, vol. 3 (October 2010): 99–115.

the Porte to make things happen quickly and efficiently, he reluctantly but immediately sought the help of a foreigner who would report to him but essentially manage all of the operations from Damascus. He chose Heinrich August Meißner (1862–1940), a talented engineer and linguist from Leipzig who had established strong credentials through his accomplished service on the İzmit-Ankara (1888–1892), Thessaloniki-Monastir (1892–1894), and the French-managed Thessaloniki-Dedeğac (1894–1896) lines.¹⁵¹ Meißner—who promptly fired La Bella, removing all but the Turkish and German parties from the project—steadfastly believed in the project’s integrity, noting that the Hejaz Railway was “the most honestly managed fund in the country.”¹⁵² Shortly thereafter, the Damascus office enlisted the American-German engineer and architect Gottlieb Schumacher (1857–1927), an established colonial leader in Haifa, to oversee the branch from Haifa to Daraa and onward to Damascus. Schumacher differed in opinion from Meißner and is reported to have confessed that he never actually believed the line would reach Mecca and that its construction was actually geostrategic, not pious.¹⁵³

The Sultan was propositioned with other forms of infrastructural development as well, receiving a fantastical proposal from the French engineer Ferdinand Arnodin (1845–1924) in 1900 for a bridge over the Bosphorus, rendered in a high orientalist idiom. [Fig 1.22] The press imagined other monuments, such as a fountain proposed by the satirical Turkish journal *Daoul* that would stand in Berlin’s Tiergarten with

¹⁵¹ A concise biography and source summary for Meißner and his previous and later professional accomplishments can be found in Herbert Pönicke, “Meißner, Heinrich August,” *Neue Deutsche Biographie*, vol. 16 (Berlin: Dunckner & Humblot, 1990), 699–700.

¹⁵² “Im Namen Allahs,” *Der Spiegel*, December 9, 1964.

¹⁵³ NA FO 78/5452, 40.

Abdülhamid, emaciated and naked, spitting out a pathetic stream of water for the passersby.¹⁵⁴ [Fig. 1.23]

In a map published in 1899 entitled *Angling in Troubled Waters* [Fig. 1.24], British cartoonist Fred W. Rose poked fun at an increasingly contentious European political landscape, summing up the state of affairs visually.¹⁵⁵ The 1899 version is noteworthy not for its particular visual content but rather the fact that the publishers marketed it as “geo-political.”¹⁵⁶ Despite its decidedly continental emphasis, the map serves as a departure point from which to explore a web of trans-continental themes that emerge in its wake, themes primarily related to the visual manifestation of geopolitics, then in its intellectual infancy, and issues of continental and civilizational encounter that such visualizations evince. The map depicts a chaotic collective of European nation states with the struggling Ottoman caricature cut off at the waist at the Bosphorus as it fishes for Cyprus and stains its pants in the Armenian parts of the country (demarcated by skulls). One interesting observation about Rose’s map is that the national caricatures

¹⁵⁴ See AA R14.155.

¹⁵⁵ It was the twenty-third successive map produced by Rose for a prestigious London map publisher, functioning as an illustrated year-in-review; a cyclical visual coda that makes manifest the growing popular fascination with the tumultuous developments of extranational relations within Europe. Little is known about Rose himself, but he had been producing similarly composed maps annually for George Washington Bacon (1830-1922) regularly since 1893. Bacon was the proprietor of the publishing house G.W. Bacon and Co. which primarily produced and sold atlases and stand-alone maps for British elite out of a storefront located at 48 Paternoster Row in London. Bacon had established a rapport with newspaper cartoonists and illustrators, for example purchasing the plates of the cartoonist Edward Weller from the *Weekly Dispatch* and publishing them in the *The New Ordinance Atlas of the British Isles* in 1893. Bacon, who was born in Lockport, New York and emigrated to London at the 31, clearly had a fascination for political satire of a particular geographic sort and played a major role in popularizing the genre in Britain.

¹⁵⁶ Bacon’s archives, located at the Jackson Homestead Manuscript and Photograph collection, in Newton MA, contains pamphlets using the term to promote the map in the winter of 1899. Accession numbers D-96-2 and D-00-5.

garner their relative importance not by their wealth or military power, but by the sheer size of their homeland.

Czar Nicholas II's (r. 1894-1917) domination of the formal image belies what was a Russian empire collapsing under social and political chaos. This reveals the latent tendency for geopolitical mapping to often equate territorial quantity with geopolitical stature. Of Russia, Rose annotates:

Russia is offering the olive branch to the world. All honour [sic] to him, but if he could discard these toys in his belt and the store under his right arm, and if we knew exactly what fish he is playing on his line, the world might be more ready to accept his offer.

Of the German empire;

The German empire, not satisfied with his success in the fields of art, oratory and literature, has taken his pack upon his back, and is looking around to see what advantages he may achieve as an imperial bagman. His fist is no longer mailed.

And on Ottoman Turkey;

Turkey, who has lost so much weight as to be scarcely recognizable, is holding his hand to his ear. Would that he might hear the howl of indignation which rises against him for the terrible stain upon his clothes. His hook is still fixed in the nose of Crete, but it looks as if it might be easily torn out. Russia treads heavily upon him, and he no longer knows the repose of by-gone days. Even the 'present for a good boy' [referring to a letter from Germany] which lies in his pocket may not bring him much satisfaction.

This map is but the first stage in a series of transpositions from the realm of geopolitical theory to the realm of the visual. The most biting and sustained of the transpositions developed into outward critiques, emblamatized by the Azeri journal *Molla Nəsrəddin*, which had regularly commented on the geopolitical jockeying of the railway project since its founding in 1906 [Figs. 1.25-1.28]. Established German publications like *Lustige Blätter* derived a great deal of pleasure from poking fun at German high finance.¹⁵⁷ [Fig 1.29] The Russian press, however, found no humor in the project. The

¹⁵⁷ The *Molla Nəsrəddin* publications have been compiled as an exhibition, and the catalogue serves as an excellent record of the publication's vitality: Slavs and Tatars [anonymous artist

Novoe Vremya declared that the railways symbolized an economic suppression of Russia that the country needed to counter in order to maintain a lifeline to the Mediterranean: “By the aid of its railway, Germany is achieving the conquests of the markets of Asia Minor and with the conquest of the markets is consolidating its political influence in the country.”¹⁵⁸ Other publications, such as *L’Illustration*, nonetheless celebrated benchmark construction accomplishments, such as the inauguration of the Hejaz Railway [Fig. 1.130].

In Berlin, meanwhile, Siemens, in ill health, was preparing to pass German leadership of the Baghdad Railway on to his successor at Deutsche Bank, Arthur von Gwinner (1856–1931). Siemens met with a group of men, several of whom had recently returned from a study expedition from Konya to Basra, to determine the anticipated costs for the railway’s construction. The men would form the core team of the project in the years that followed: Schrader, Kapp von Gülstein, General Consul in İstanbul Wilhelm Stemrich (1852–1911), Dr. Kurt Zander, the director of the Anatolian Railway Company (and an avid collector of oriental textiles), and the Swiss and German engineers Edouard Huguenin (1856–1926) and Ernst Mackensen (1840–1909), respectively. The sum Siemens anticipated was considerable—approximately 700,000 Turkish pounds per year of operation.¹⁵⁹ The agreement between the railway company and the Porte was, in principal, based on a system of kilometric guarantees: 11,000 francs per kilometer in full

collective], eds., *Slavs and Tatars Presents Molla Nasreddin: The Magazine that Would’ve, Could’ve, Should’ve* (Zurich: JRP/Ringier, 2011).

¹⁵⁸ The article was published on July 17, 1903, and is retained in NA FO 406/19, 64-65.

¹⁵⁹ Ba 8119f/8113, 2–12.

operation and 4,500 francs per kilometer under construction.¹⁶⁰ These were to be delivered from “excess” revenues raised by the normal taxes of the *vilayets*, which meant, in theory, that the citizens who most benefitted from the railway were the ones paying for it. The Baghdad Railway Company, with Siemens and Deutsche Bank at the helm, would be financially responsible for the construction of railway depots and stations, post offices, police stations, and telegraph lines along the route.¹⁶¹ Although similar to previous railway agreements in practice, this one made explicit the sequence of construction: the railway company would notify the Porte about the precise land it wanted to use, the Porte would facilitate this or suggest alterations, the railway company would in turn design the necessary structures, and the Porte would approve or reject them. This was ambiguous transmutation in action.

Just months before his death, Siemens traveled across Europe to raise the necessary capital, and this eventually produced a convoluted, yet effective, financial capital structure. The structure consisted of an initial base of 15 million francs divided among 30,000 shares at 500 francs each.¹⁶² The Ottoman government and the Anatolian Railway Company each purchased 10 percent of the shares outright.¹⁶³ Siemens further

¹⁶⁰ According to McMurray (*Distant Ties*, 50n30), in 1903, when the agreement was reached, 2 Turkish lira = 18.54 marks = 22.73 francs.

¹⁶¹ Article 31 made the special stipulation that while the railway company was to build the telegraph lines, it was not allowed to use the telegraph for personal use. McMurray also makes note of this (*Distant Ties*, 50n31).

¹⁶² McMurray, *Distant Ties*, 52.

¹⁶³ *Ibid.*

brought together a financial conglomerate of German, French, Austrian, Swiss, Italian, and Ottoman banks that acquired the remaining 80 percent.¹⁶⁴

With a financial structure in place, the concession for the Baghdad Railway was signed by the syndicate and the Porte in March 1903. The agreement and its articles contain a far more comprehensive consideration of the various steps involved in the railway's realization than did the previous agreement for the Anatolian Railway. These include Article VI, which regulated the process of land acquisition; Article XXIV, which mandated the use of local materials for building purposes; Article XXVI, which stipulated the necessity to build from west to east; Article XXVII, which regulated the possibility of encounters with antiquities; and a statute that designated the "disposition" of railway buildings as falling under the jurisdiction of the Ottoman Ministry of Public Works.¹⁶⁵ With this agreement, they established the Société Imperiale Ottomane du Chemin de Fer de Bagdad.

In Ereğli, southwest of Konya, the Vali and the city's citizens celebrated the opening of the first leg of the Baghdad Railway in October 1904, and Zander received the prestigious Order of the Medjidie for his role. Departing from Konya, where a new hotel and workers' colony had recently been completed and a major irrigation project had begun, attendees of the ceremony later reported to the press a markedly smoother ride to Ereğli.¹⁶⁶ This was a testament to the advances made in engineering over the course of only a few years. Some noticed what they thought were extraneous curvatures between

¹⁶⁴ Max Schlagintweit, "Verkehrswege und Verkehrsprojekte in Vorderasien," *Schriften der Deutsch-Asiatischen Gesellschaft* 2 (1906): 17.

¹⁶⁵ NA FO 881/9803.

¹⁶⁶ Ba R901, AAHP #15071, 22.

the two cities, embellishments they suspected were added for financial gain.¹⁶⁷ Similar to Konya, the inauguration of the Haifa line the following year spared no flowery language to praise the Sultan and typified the comments made by the local authorities:

The Sultan then made his grand pilgrimage to the house of God and the visit to the garden (grave) of the messenger of God (prophet). The Sultan then gave his grand command (may God lengthen his rule) that a railway line should be laid from Haifa to connect with the Hamidiyya Hejaz line. Therefore it is the duty of every Muslim who made this pilgrimage to the house of God and availed himself of the visit to the grave of the Prophet to pray to God to support the Sultan's Grand Khalifate and to raise his high hand over the heads of the people.¹⁶⁸

The New York Times aptly suspected a few weeks prior to the Ereğli opening that the renewed German activity in the Ottoman empire was causing “renewed distrust” in England.¹⁶⁹ With few options for recourse, the best that could be done was to produce tactical signs of displeasure, such as one official's discouraging Muslim subjects in India from wearing their Hejaz medallions in public.¹⁷⁰

But then a near disastrous diplomatic crisis occurred far away in the Sultanate of Morocco.¹⁷¹ Aware of French plans to possibly break an 1880 agreement stipulating that

¹⁶⁷ Adam Block, memorandum to the Foreign Office, NA FO 881/9437, 42.

¹⁶⁸ İbrahim Usul, Mustafa Aksay, and Ömer Faruk Erten, *İstanbul'dan Medine'ye bir Tarih Belgeseli: Hicaz Demiryolu* (İstanbul: Albaraka Türk, 1999), 204–5. The full quote in Turkish is: “Bismillahirrahmanirrahim, Peygamberin Halifesi ve Mü'minlerin Emiri, İki Kıt'anın Sultanı ve İki Okyanusun Hanı, Sultanlar Sultanı, Büyük Fatih Sultan Abdülmecid'in oğlu Abdülhamid Han—Allah O'nun saltanatını korusun ve ömrünü uzun etsin—Şam'dan başlayan bir demiryolu inşasını emretti ki böylece Muhammed Ümmeti, Allh'ın Evi'ni ve Ravza-ı Mutahhara'yı ziyaret edebilsinler. Ve yine Hayfa'dan Hamidiye Hicaz Hattı'na birleştirilmek üzere bir hattın döşenmesini emretti. Böylece Hacc farızasını yerine getirecek ve [Allh'ın Evi'ni ve] Ravza-ı Mutahhara'yı ziyaret edecek her müslüman ellerini semaya açarak, Sultan'ın büyük hliafeti için Allah'a dua etsin, 1319 (1905 Miladi).”

¹⁶⁹ “Germany Causes Renewed Distrust in Great Britain,” *The New York Times*, April 18, 1903.

¹⁷⁰ Foreign Office to Musurus Pasha, January 30, 1904 (draft), NA FO 78/5452, 195.

¹⁷¹ See David G. Herrmann, *The Arming of Europe and the Making of the First World War* (Princeton, NJ: Princeton University Press, 1996), 37–58.

a pan-European consensus on the political future of Morocco was necessary if the Sultanate of Morocco were to be dissolved, German Secretary of State Bernhard von Bülow (1849–1929) encouraged the Kaiser to stop in Tangier during a Mediterranean cruise. The Kaiser made a public statement unexpectedly supporting an independent Morocco on March 31, 1905, warmly addressing Sultan Abdülaziz (r. 1894–1908) in a meeting that many abroad found downright bizarre and, more importantly, deeply provocative. Some have argued that the Kaiser was seeking to provoke a rift between Britain and France, while others have characterized his address as a supercilious flaunting of the military might Germany had acquired by 1905.¹⁷² The bid of support, which likely appealed to Abdülhamid's sensitivities at Caliph, roiled one of the Kaiser's most disliked foes, French Foreign Minister Théophile Delcassé (1852-1923). Rather than retreat, France drew upon the *Entente Cordiale* it had established with Britain a year earlier, and the two states began to take stock of their joint military strength, raising the specter of a continental confrontation. The Algeciras Conference from January 16 to April 7, 1906 ultimately proved that, with the exception of Austria-Hungary, neither the other European powers nor the United States would support a fully sovereign Morocco, and the French in effect annexed it, leaving only the Moroccan police force as an independent entity.¹⁷³

Another diplomatic crisis between the British and the Porte was unfolding during the proceedings at Algeciras—the so-called Aqaba Crisis. In 1905, the Porte had made public its plan to create a branch line of the Hejaz Railway between Batn al-Ghul and the

¹⁷² Carl Schorske emphasizes the former. See Carl Schorske, *German Social Democracy, 1905-1917: The Development of the Great Schism* (Cambridge, MA: 1955), 197-223. Herrmann emphasizes the latter. See Herrmann, *The Arming of Europe*, 37-58.

¹⁷³ Herrmann, *The Arming of Europe*, 39.

Gulf of Aqaba, forging a northerly maritime connection between the Hejaz Railway and the Red Sea. *The Levant Herald* affectionately dubbed the railway the “Istanbul-Sinai” line, while the Egyptian newspaper *Les Pyramides* feared it would be the southerly extension of “German Anatolia.”¹⁷⁴ Early in 1906, Ottoman troops entered the Egyptian town of Taba on the adjacent side of the Gulf’s northern marine terminus, hoping to establish a greater territorial hold at Aqaba. They were immediately repelled by British troops and later agreed to a compromise, relinquishing a small portion west of Aqaba (modern-day Eilat) while retaining Taba.¹⁷⁵

It comes as no surprise, then, that there had been a marked increase in the frequency with which the British consuls across the empire reported on German-Ottoman affairs during the preceding years. Reporting every last ceremonial detail of the inauguration of the Hejaz railway’s completion to Ma’an on the afternoon of September 1904, W.S. Richards, the Consul at Damascus, reassured London that no outwardly German character was evident. Yet Turkhan Pasha, an ex-Foreign Minister and member of the Council of the State (*Shura-i Devlet*), relayed the Sultan’s praise for the immense progress made in the construction, and Richards interpreted this as an homage to Meißner who, incidentally, had just received the title of “Pasha.”¹⁷⁶

¹⁷⁴ “Le Chemin de Fer du Hédjaz,” *The Levant Herald and Eastern Express*, April 4, 1905, located in NA FO 78/5452; and “La Question du Golfe Persique,” *Les Pyramides*, May 17, 1906, located in AA Orientalia Generalia R14560-2/Bd. 7.

¹⁷⁵ Bernard Lewis, *Islam in History: Ideas, People, and Events in the Middle East* (New York: Open Court, 1993), 161–62.

¹⁷⁶ W. S. Richards to Nicholas O’Conor, Damascus, September 8, 1904. NA FO 78/5452, 232–33.

The Ottoman populace generally thought of the railways as a monolithic enterprise being implemented by the Porte and the German capitalists, although this did not prevent the occasional entrepreneurial citizen from attempting to either become directly involved or create privatized alternatives. In September 1905, Gabriel Aşfar, a wealthy Armenian merchant from Baghdad who was the French Deputy Vice Consul at Basra, applied for a concession to construct a tramway directly from Damascus to Baghdad.¹⁷⁷ He was immediately rejected. German influence, however, continued to expand. In 1906, the Dresdner Bank followed Deutsche Bank as the second German bank to have a presence in İstanbul with the creation of the Deutsche Orientbank, which was initially located at the Agopian Han on the famed Bankalar Caddesi or “Rue Voïwode” in Galata. There the bank shared space with the headquarters of Compagnie du Chemin de Fer Mersine-Tarsus-Adana, which had recently been transferred from French to German management. The bank later created two new locations, one in a new individually occupied building just a stone’s throw from Sirkeci Station (and designed by the same architect, August Jachmund), the other in Pera at 407 İstiklal Caddesi.¹⁷⁸

But the Aqaba incident had also incited legitimate and increasing concerns that the Germans, like the British, were adjudicating Ottoman affairs and manipulating the Sultan. In 1906, the German Chargé d’Affaires in İstanbul wrote:

¹⁷⁷ Consul-General Newmarch to Sir N. O’Conor, Baghdad, September 4, 1905, NA FO 206/26, 43. A brief biographical entry on Aşfar’s family appears in Hala Fattah, *The Politics of Regional Trade in Iraq, Arabia, and the Gulf, 1745–1900* (Albany: State University of New York Press, 1997), 91–92.

¹⁷⁸ Edhem Eldem, *Bankalar Caddesi: Osmanlı’dan Günümüze Voyvoda Caddesi* (İstanbul: Osmanlı Bankası Bankacılık ve Finans Tarihi Araştırma ve Belge Merkezi, 2000), 125. Additional addresses were located in GSPK 4508.

It would be self-deceiving to believe that we still have many sincere friends in Turkey. There are signs of an undeniable gradual decline in the sympathies for us by the Turks... The majority of the Turkish ministers and the high palace officials make no secret that they view our Turk-friendliness only as a means to egotistically exploit Turkey and get out of [it] as many financial and other advantages as possible.¹⁷⁹

Meanwhile, as the British were still trying to catch their breath from the averted crisis in Morocco, the Baghdad consulate was reporting with increasing urgency the perils of a full German penetration, in both economic and geopolitical terms:

The Germans have already clearly shown that they have no intention of confining their energies to the mere construction of a through line rail.... Schemes have also been started by German commercial associations for the exploitation of the mineral wealth of the country traversed by the railway. Nor do they intend to restrict their activity to Mesopotamia only.... A scheme had even been mentioned for starting at Bahrein [Bahrain] a banking businesses under the auspices of Deutsche Bank.... The arrival of a German railway at Bussorah [Basra], Um Kasr, Koweit [Kuwait], or any other point in this quarter, [would bring] the Germanization of the Bagdad [Baghdad] and Bussorah Vilayets, the diminution of British prestige and commerce in these provinces, and the disturbance of our relations with the Arab Chiefs on the southern and western shores of the Gulf; it would react on our position in Persia, and would possibly, if indeed not probably, necessitate a considerable increase to the British naval forces which at present are stationed in these waters.¹⁸⁰

The British concerns were certainly not unfounded. Indeed, German Chancellor Theobald von Bethman-Hollweg (1856–1921) had already sought a strategic alliance with the Russians to create a branch from Baghdad to Khanikin at the border with northern Persia, where Russian influence dominated, creating the appearance that Germany and Russia were suddenly warming up to one another.¹⁸¹ One consular report

¹⁷⁹ Bodman to Prince Bernhard von Bülow, July 6, 1906, GSPK 8641. Cited also by McMurray, *Distant Ties*, 59.

¹⁸⁰ Government of India to John Morley, Simla, July 12, 1906, NA FO 881/9055X, 7–8.

¹⁸¹ The Khanikin Railway project has received surprisingly little attention in the history of the Ottoman railways in general and the Baghdad Railway in particular. It is generally mentioned in passing as an item of German-Russian-British diplomatic history; Adolphus William Ward and George Peabody Gooch, *The Cambridge History of British Foreign Policy*, vol. 3, 1866–1919 (Cambridge: Cambridge University Press, 2012), 478; Reinhard Hüber, *Die Bagdadbahn* (Berlin: Junker und Dunnhaupt, 1943), 114.

went so far as to venture that the task of the Iraq railways should be the province of the British, not the Germans, for “Englishmen can work in climates where Germans can barely exist.”¹⁸² Fear of an incursion in or around the British protectorate of Kuwait (considered a preferable maritime terminus for the railway over Iraqi Basra because of the natural harbor conditions) also frightened the newly semi-independent sheikhs of Kuwait. Sheikh Mubarak al-Sabah (1840–1915) sought British help to strengthen the British port operations and the British swiftly agreed, building a number of wharves and other facilities for the Kuwaitis in 1906 and 1907.¹⁸³ But the fact remained that to most high-level officials in Britain, the railway was, at least economically, insignificant apart from its role in the Persian Gulf. Adam Block, a British writer and specialist on Ottoman debt, reported:

There is no doubt compensation from the increase of land area under cultivation, which has produced a consequent increase of the tithe revenue and the railways have naturally produced a certain amount of prosperity; but as long as commerce is obstructed and industrial liberty is interfered with by puerile police measures, and as long as the construction of roads, bridges, tramways, irrigation and harbor works is neglected, the railways cannot pay their way for a long time to come.¹⁸⁴

Writing amid the tense climate in Frankfurt, the British Consul to Germany ventured a comprehensive psychopolitical picture of the railway and its events in March 1907, noting how the German press downplayed the “colonization” effort, strategically diminishing the railway’s geopolitical significance so as not to raise international suspicion.¹⁸⁵ However, Wilhelm’s characteristic nicety, “my friend the Sultan,” belied

¹⁸² Sir Cecil Spring-Rice to Sir Edward Grey, Tehran, January 4, 1907, NA FO 406/31, 6.

¹⁸³ Admiral Evan MacGregor to India Office, July 11, 1906, NA FO 881/9055X, 10.

¹⁸⁴ Memorandum by Adam Block to the Foreign Office, NA FO 881/9437, 31.

¹⁸⁵ Consul-General Oppenheimer to Sir F. Lascelles, Frankfurt am Main, March 12, 1907, NA FO 406/31, 48.

more subversive ambitions. “There is no doubt,” he wrote, “that in the eyes of many Germans ... Asia Minor is considered more thoroughly German than some of the German colonies.”¹⁸⁶ The colonization was furthered by what traveler David Fraser identified as a facilitative role played by religious Turks, from the bureaucracy down to the peasants, and perhaps more generally by Islam. After a secretive trip to many of the rail sites in 1908, Fraser determined that the problem was

the indolence of the peasant, who has no ambition beyond the immediate needs of his belly. To work hard to-day that he may have some money for to-morrow is unnecessary in the part of an individual who believes that his future lies entirely in the hands of God.¹⁸⁷

What Fraser did not reckon with, however, was the number of Turks who did *not* believe that their fate lay in God’s hands, a group who would mobilize a radical shift in the empire’s state of affairs—as well as that of the railways—in the coming years.

1.7 Railway and Revolution: The Young Turk Period, 1908–1914

By 1908, there was a significant, formalized union of Ottoman military officers based in Ottoman Macedonia and known under the umbrella title *Committee for Union and Progress* (CUP; *İttihat ve Terakki Cemiyeti*).¹⁸⁸ Systematically aggrieved by the Sultan’s suppression of modern Western democratic principles (as distinct from “modernization” in the technological sense), the CUP reached a breaking point in the

¹⁸⁶ Ibid.

¹⁸⁷ David Fraser, “Report on Journey between Constantinople and Eregli made in November 1907,” NA FO 406/33, 12.

¹⁸⁸ Incidentally, Mustafa Kemal had been appointed inspector of the eastern Rumelian in June of 1908 while coming to influence in the CUP ranks.

summer of 1908, when their march in July from Macedonia to İstanbul realized the Sultan's worst fears of an organized coup against him. In a remarkable turn of events meant to stave off a conflict in the capital, Abdülhamid reinstated the suspended constitution and the parliament on July 24. Nationalist hopes were aroused across the empire, and a new post-autocratic era seemed imminent until a chaotic military counter coup in April 1909 generated even more chaos throughout the empire. Regaining hold of parliament, the three main leaders of the CUP, Mehmed Talat (1874–1921), Enver Pasha (1881–1922), and Ahmed Cemal (1872–1922), deposed Abdülhamid on April 27 and installed his brother Mehmed V (r. 1909–1918) as the primarily ceremonial new Sultan. The future of German interests and activities, which had been so deeply associated with Abdülhamid, remained to be seen.

Construction of the Hejaz Railway and its branches had proceeded extraordinarily well, and on September 1, 1908, just five weeks after the reinstallation of the constitution, the line was opened to Medina with great fanfare. The political situation, however, gave pragmatic credence to the view that a railway should not penetrate Mecca itself, and so the final 338 kilometers of the pilgrimage to Mecca would continue to be conducted, as it had been for centuries, by foot.¹⁸⁹ The Hejaz railway was effectively ready for operation at the time of the January 1909 pilgrimage. At first glance, everything also seemed to be going well for the Baghdad Railway: as part of its expansion, a magnificent new and deeply symbolic terminal station at Haydarpaşa was completed and inaugurated in 1909. On the other hand, construction in the hinterland had made no kilometric progress since October 1904, partly because of financial struggles and partly because of the challenges

¹⁸⁹ Ochsenwald, *Hijaz Railroad*, 103.

of penetrating the Taurus and Amanus ranges, which required an unprecedented effort in boring tunnels, building bridges, and negotiating labor and supplies across difficult terrain. Rather anticlimactically, the rails had only reached the tiny hamlet of Bulgurlu, east of Ereğli and close to the foot of the mountain range, jutting outward into a barren landscape in a manner that symbolized to many visitors the reckoning of grand vision with common reality. As such, the fate of the stretch from Bulgurlu to Baghdad was imbued with all of the pressures of the revolutionary period and would remain the Porte's singular focus for the next decade.

Confirming Şükrü Hanioglu's depiction of the Young Turk Revolution as one that prioritized political revolution over humanitarian progress, a workers' strike in September of 1908 was an exemplar of the personal empowerment that rippled across the empire in the wake of the Second Constitution Era (the period immediately following Abdülhamid's reinstatement of the imperial constitution). Approximately 700 workers, members of the Union des Employés du Chemin de Fer d'Anatolie, met with their lawyer and CUP leader Hacı Adil Bey (1869–1935) at Haydarpaşa on August 22nd and mounted a list of concerns that stressed, most saliently, that the strike was not a revolutionary labor movement tied to the revolutionary events of the day and that the workers maintained the right to protest:

We strongly protest against the false idea that we seek to spread revolution.

Be sure dear comrades, our word would be more revolutionarily pronounced if we were.

If there are judges in Berlin there also must be in Scutari. Nobody has the right to slander us while the law protects you.¹⁹⁰

¹⁹⁰ GSPK 4508. "Nous protestons tous énergiquement contre la fausse idée que l'on cherche à répandre, que nous sommes des révolutionnaires et des grévistes. Soyez sûrs chers camarades, que le mot révolutionnaire ne sera plus prononcé parmi vous. S'il y a des juges à Berlin, il y en a aussi à Scutari. Personne n'a le droit de vous calomnier ainsi, la loi vous protège."

Rather, the strikers emphasized Islam as well as Ottomanism, to provide a reason why the railway administrators should not fear that they had a political revolution on their hands (despite the political undercurrents). The workers invoked the Qur'an to underscore their inherent openness to foreigners, but also to stipulate their right to take issue with particular administrators and/or laborers if they deemed them abusive or otherwise unfit:

It [Deutsche Bank] has also wanted to intimidate you by claiming that your association is illegal because among you there are a few of foreign nationality. It makes me laugh, for we Ottomans have never distinguished between our compatriots and friends overseas. The Qur'an and Muslim laws require us to consider all men—without distinction of race, nationality and religion—as our brothers and to treat them as [God] teaches. Does a Muslim need these suppositions? No, I do not think so, because he has only to turn to his own feelings and to be proud to say that no one has feelings of hospitality more developed than he. This has been proven, and no one disputes it. Woe to those who seek to tarnish the reputation that brought honor to our country. We do not say we do not want any foreign [collaborators], but we reserve the right to say at any time that we do not want this or that person, because he simply does not belong.¹⁹¹

The workers' dissatisfaction caught the Baghdad Railway administrators completely off guard and, interpreting the problem as fiscal rather than cultural, they sought Deutsche Bank's help in finding a solution. Slight pay raises were made retroactively to September 1908, but Deutsche Bank did not offer suggestions about the cultural issues, leaving that up to the administrators—who, as a group primarily

¹⁹¹ Ibid. "On a aussi voulu vous intimider en prétextant que votre Association est illégale parce que parmi vous il se trouve quelques adhérents de nationalité étrangère. Cela me fait rire, car nous autres Ottomans nous n'avons jamais établi de distinction entre nos compatriotes et nos amis les étrangers. Le Coran et les lois musulmanes nous prescrivent de considérer tous les hommes sans distinction de race, de nationalité et de religion, comme nos frères, et de les traiter comme tels. Un musulman a-t-il besoin de ces prescriptions pour s'y soumettre? Non, je ne le crois pas, car il n'a qu'à s'adresser à ses propres sentiments pour être fier de dire que nul n'a le sentiment de l'hospitalité plus développé que lui. Cela a été prouvé, et personne ne le conteste. Malheur donc à ceux qui cherchent à ternir cette renommée qui fait honneur à notre Patrie. Nous ne dirons jamais que nous ne voulons pas d'un étranger quelconque, mais nous pourrions dire à l'occasion, que nous ne voulons pas de telle ou telle personne, parce que sa place n'est pas là, et qu'elle a été favorisée au détriment d'une autre."

consisting of engineers and architects, were largely untrained in cutting-edge methods of multicultural sensitivity and therefore made patchwork alterations to their previous policies for fear of a complete mutiny.

But there is also significant evidence that the leading German engineers and architects employed by the Baghdad Railway treated their Ottoman employees with a humanitarian spirit that saved lives in certain instances. It is not in the purview of this study to decipher the nature of the systematic obliteration of Armenian Ottomans, but the construction and existence of the Baghdad Railway interloped in historically significant ways with the tragic events that occurred.¹⁹² The events also forced many of the German engineers and architects to reckon with certain elements of their own identity in ways they had not needed to since arriving in the Ottoman empire forty years earlier.

One poignant case is the engineer Emil Heubusch (1881–1964), whose diaries provide an intimate portrait of everyday life on the railway amidst the tumultuous events of 1908–1919. In July of 1908, Heubusch arrived in the newly-established section headquarters in Adana, where he began his service as a surveyor of the Adana-Bahçe and Hammam-Aleppo sections of the route before becoming the senior engineer of the Adana-Aleppo section of the railway. This placed Heubusch, his wife, and their young daughter in Adana during the counter coup in İstanbul. Fearful that the CUP's overthrow by the counterrevolutionaries would spell the revolt of the region's large Armenian population, local Muslims gathered on April 14, 1909, and executed between fifteen and thirty thousand Armenian men, women, and children. Heubusch's diary entries for April

¹⁹² There is a tremendous amount of literature on the Armenian massacres, much of it uneven. An exemplary study of the events between 1896 and 1924 appears in Guenter Lewy, *The Armenian Massacres in Ottoman Turkey: A Disputed Genocide* (Salt Lake City: University of Utah Press, 2005).

13 and April 14 demonstrate the vicissitudes of the human experience in such events. In the former entry, Heubusch fondly recalls listening to a band of Italian, French, and Levantine musicians in nearby Mopuestia (Missis).¹⁹³ In the latter, Heubusch travels from Mopuestia to Adana and describes the harrowing scene:

The closer we got to Adana, the worse the images became. People shot down in firing lines were laid in the fields, making space for additional refugees from the small villages to be shot down with no further ado. Neither woman nor child was spared. On both sides of the road the fiends doused the bodies and set them ablaze.¹⁹⁴

Heubusch goes on to describe the charred ruins of much of the city, which included the area adjacent to the future location of the railway station. Foreign missionaries and agencies—primarily British, American, French, and German—set up camps for survivors of the attacks. In one camp, Heubusch, equipped with a camera used for railway surveying, captured a young woman whose back had been severely burnt in an attack. [Fig 1.31] Another image shows German engineers and nurses taking care of shell-shocked Armenian children in the area of Adana. [Fig. 1.32] Other railway affiliates, including the Adana-based Anatolische Baumwoll-Dampfpresse Gesellschaft, sent no reports to Berlin. The British diplomat Sir Charles Murray Marling reported that when possible, the Baghdad Railway management safeguarded Armenian survivors as employees following the massacres.¹⁹⁵ In the end, Heubusch (who was twenty-seven

¹⁹³ As cited in Peter Heigl, *Schotter für die Wüste: die Bagdadbahn und ihre deutschen Bauingenieure* (Nürnberg: P. Heigl, 2004), 68.

¹⁹⁴ Ibid., 69. “Je näher wir Adana kamen, um so grauenvoller wurden die Bilder. Wie in Schützenlinien lagen die Fellachen in den Feldern, um die Flüchtlinge aus den Dörfern kurzerhand niederzuknallen. Weder Weib noch Kind wurden geschont. Zu beiden Seiten der Straße lagen die Ärmsten, welche die Unholde geschändet, mit Petroleum übergossen und dann angezündet hatten.” Additional accounts of the massacres at Adana were reported in less vivid and personal terms from the German consulate in Adana to the Foreign Office in Berlin; see AA Bände Konsulat Adana, prior to 1911.

¹⁹⁵ Charles Marling to Sir Edward Grey, Constantinople, November 5, 1909, NA FO 406/34, 37.

years old at the time) and countless of his German comrades did not raise their voices to protest what they had witnessed on that day; but the atrocities stuck with Heubusch for the balance of his stay in Adana, largely because they seemed to place his Christian faith in dialectical conflict with his professional ambitions as the builder of a great railway.

By the early twentieth century, the ascendancy of the German steel industry, emblemized by the Krupp company, whose steel was used throughout the railways, had made Germany the most powerful economy in Europe, surpassing Britain sometime around 1902.¹⁹⁶ Personal prosperity skyrocketed, and it became increasingly difficult to attract skilled men (and women) like Heubusch to a conflict-ridden Ottoman empire to build railways in some of its most challenging settings. Expansive marketing efforts to do so began in 1909, most prominently through the printing of several thousand pamphlets that were circulated to young engineering graduates. A pamphlet authored by the lawyer and publicist W. Plenske, entitled “*Aufruf. Deutsche Männer! Deutsche Frauen! Wahret Eure Interessen im Orient!* (Call to German Men! German Women! Realize your Interests in the Orient!) laid bare the nationalist aspects of the Baghdad Railway’s construction, attempting to tap into a heady mix of populist, orientalist, and colonial elements and to convince colonist-workers to come to Mesopotamia. A sampling of the lofty rhetoric follows:

Realize your interests in the Orient! She is worth millions and is in danger of being lost. Help strengthen the Germans in the East and consolidate it with strong roots so that she may bear fruit! The tremendous work that has been done in the land of paradise by the German entrepreneurial spirit shall not have been in vain. Right now an opportune time has come in which we can cooperate on the great peaceful works of the German revival of the Euphrates and Tigris areas where she brings life to new heights. Our pioneers are the strangers who will stand in the good light of public opinion and may be emboldened

¹⁹⁶ This is interpolated from Paul Bairoch, “Europe’s Gross National Product: 1800–1975,” *Journal of European Economic History* 5 (1994): 281, Table 4, and 295, Table 10.

by patriotism. This will bring them the support and strength to continue the work. Although the work is large and difficult, our effort and work is worthwhile if it brings a more beautiful prospect.¹⁹⁷

All the preconditions are met, all that is needed is a powerful, energetic personality that understands how to exploit the situation to allow new life to grow from the pile of ugliness and disorder, and to form a thriving empire with modern commerce.¹⁹⁸

The research of Ur is the most important task of all historical knowledge and a most beautiful inheritance, which the 19th and 20th centuries have left behind. This research must go hand-in-hand with economic revitalization.¹⁹⁹

But reasons *not* to go to Turkey to work seemed only to be piling up. A chain of events in October 1908 served to further unsettle the state of affairs—at least at the political level. Bulgaria claimed full independence, Austria-Hungary annexed Bosnia and Herzegovina from the Ottoman empire, and Crete stated its intention to be assimilated to Greece—all within one week. The annexation of Bosnia, in particular, undid the shaky continental arrangement, fracturing Austria’s relations with Russia, who had a vested interest in a unified and independent Serbia, and further deepening the schisms

¹⁹⁷ Dr. jur. W. Plenske, *Aufruf. Deutsche Männer! Deutsche Frauen! Wahret Eure Interessen im Orient!* (Berlin: Verlag Alfred Pulvermacher, 1909), 1. “Wahret Eure Interessen im Orient! Sie sind Millionen wert und schweben in Gefahr, verloren zu gehen. Helft das Deutschtum im Osten stärken und festigen, damit es kräftige Wurzeln schlägt und Früchte bringen kann! Die gewaltige Arbeit, welche der deutsche Unternehmerrmut bisher im Lande des einstiegen Paradieses geleistet hat, darf nicht vergeblich gewesen sein. Gerade jetzt ist ein günstiger Zeitpunkt gekommen, in welchem wir Deutsche an der Erweckung der Euphrat- und Tigrisländer zu neuem Leben und zu neuer Blüte mitarbeiten und bei dem großen Friedenswerke die Führerschaft übernehmen müssen. Unsere Pioniere in der Fremde sollen erfahren, dass unsere Sympathie, die Zustimmung der öffentlichen Meinung und das vaterländische Bewusstsein hinter ihnen stehen. Dies wird ihnen dann einen Rückhalt und neue Kraft zum Weiterschaffen geben. Das Werk ist zwar gross und schwierig, aber unsere Mühe und Arbeit lohnen sich, denn es steht ein schöner Gewinn für die Gesamtheit und für den einzelnen in Aussicht.” This document is located in Ba R901/6667.

¹⁹⁸ Ibid., 14. “Alle Vorbedingungen sind erfüllt, es bedarf nur noch einer kraftvollen, energischen Persönlichkeit, die die Lage auszunützen versteht, um aus dem Haufen von Unschönheit und Unordnung ein blühendes Reich mit modernen Handelsstätten neu erstehen zu lassen.”

¹⁹⁹ Ibid., 6. “Die Erforschung Urbabyloniens ist die wichtigste Aufgabe, aller retrospektiven Wissenschaft und ein schöner Erbteil, welchen das 19. dem 20. Jahrhundert hinterlassen hat. Mit dieser wissenschaftlichen Erforschung muss aber die wirtschaftliche Neubelebung Hand in Hand gehen.”

between the allied German-speaking Central Europe and its eastern and western neighbors.

Germany attempted to stay out of the Bosnian Crisis of 1908–1909, even though it had an assumed loyalty to Austria-Hungary through the Dual Alliance of 1879.²⁰⁰ German orientalist knowledge, which had remained largely cloistered in academia over the course of the nineteenth century, was just beginning to be integrated into geopolitical thought and cultural diplomacy. This was in part due to the pioneering work of the orientalist and politico Carl Heinrich Becker (1876–1933). Becker introduced the use of sociological methods in Islamic studies, which had hitherto focused almost entirely on historical and philological concerns.²⁰¹ The sociological approach took hold in his important comparative study of Islam and Christianity, *Christentum und Islam*²⁰², in 1907, and was sustained in his regular articles published in *Der Islam*, a journal he founded in 1910.

The Young Turk Revolution and the worker's strike were responsible for an extended pause in the construction of the Baghdad Railway, through January of 1910, and, notably, this resulted in a public discussion as to the conceptual nature of the railway's cultural and political significance. While traveling along the Baghdad

²⁰⁰ The Dual Alliance (*Zweibund*) essentially guaranteed that if either Austria-Hungary or the German Empire were attacked by Russia, it would be defended by the other. This secret alliance is frequently characterized as a typical Bismarckian diplomatic maneuver, one that would eventually become an important factor in Germany's participation in the Great War. It also ushered in an era where this type of geopolitical union was made with greater frequency. See Helmut Rumpler, *Der „Zweibund“ 1879: Das deutsch-österreichisch-ungarische Bündnis und die europäische Diplomatie* (Vienna: Österreichische Akademie der Wissenschaften, Historische Kommission, 1996).

²⁰¹ This topic is exhaustively covered by Suzanne Marchand in *German Orientalism in the Age of Empire: Religion, Race, and Scholarship* (Cambridge: Cambridge University Press, 2009).

²⁰² Carl Heinrich Becker, *Christentum und Islam* (Tübingen, Germany: Mohr, 1907).

Railway's projected path in Iraq in 1908, David Fraser encountered several Germans, including a handful of archaeologists busy in the ancient city of Assur on the western bank of the Tigris. Commenting on the work of Walter Andrae (1875–1956) and Robert Koldewey (1885–1925), Fraser portended that, despite the advancements of people like Becker, the myopia of German “science” was unable to understand the greater import of the railway, no less its potential in the Near East. He noted:

Man and railways have a trick of reacting upon each other, to their mutual benefit. We have become so accustomed to observe the amazing success of the process in various parts of the world, that we are apt to lose sight of the fact there is little intrinsic merit in the conjunction, and that if certain elements are not favourable man may be brought to a railway, or a railway brought to man, without there ensuing any material gain in prosperity.²⁰³

Fraser's critique that the railway would have no “material gain” hinges significantly on what he saw as the strictly technoscientific nature of the project. For Fraser, the work of Koldewey and Andrae, and possibly the later example of the archaeological work of the Cologne bank heir and orientalist Max von Oppenheim (1860–1946), typified slavish German academicism (or positivism) and the German inability to make an even greater colonial endeavor of the Baghdad Railway:

One wonders, perhaps, whether the great devotion to detail may not tend to lower that power of imagination which must initiate everything great, and if the studious, methodical, industrious German does not sometimes miss the essential in his pursuit of the concrete.²⁰⁴

German sources generally indicate that railway engineers and archaeologists were not as naïve as Fraser would have it, but his comment raises the important question of precisely why the peculiarities of the German orientalist knowledge system (and its quiet marriage

²⁰³ David Fraser, *The Short Cut to India: The Record of a Journey along the Route of the Baghdad Railway* (Edinburgh: William Blackwood and Sons, 1909), 296.

²⁰⁴ *Ibid.*, 224–27.

to the technological expertise of the railway) did not correspond with the more conventional colonial models of the British.

Another underestimated group in the colonial question is the Turks themselves, who, as numerous accounts indicate, did not necessarily think they were exploited by the Baghdad Railway, either commercially or archaeologically. While some cultural luminaries—most notably, Osman Hamdi Bey (1842—1910)—did at times express reservations about the railway’s collusion with cultural endeavors, particularly archaeology, others chose to see it as the salve for a potentially regressive regime shift. Writing from İstanbul in May 1909, the feminist nationalist, novelist, and political critic Halide Edip Adivar (1884–1964) articulated the railway’s importance for the future of a modern Turkish state:

The country is in a transition period of restless desire and struggle for modern civilization. The old and the new are fighting hand to hand. Those who lead the new know that they have to face obstacles of all kinds, even perfidious accusations; but they have no time to halt, be it for an instant. The integrity, the very life of the nation depends on their success. They cannot go a step further on the road of the civilized world if they cannot suppress the prejudices and the ignorance that leads to the massacring of their fellow countrymen because they are Christians.²⁰⁵

Adivar’s impassioned plea for the new regime to retain and appreciate the advantages of Ottoman multicultural society and to use the modernization as a framework for doing this had some concrete effects. In February 1910, a new minister of public works and agriculture was appointed, the Armenian B. Haladjian Effendi (d. 1915), who initiated an extensive campaign for the construction of new road networks. Perhaps in an

²⁰⁵ Halide Edip Adivar, “The Young Turks and the Massacres: A Turkish Lady’s Views,” *Egyptian Gazette* (Alexandria), May 19, 1909. This is also located in AA Orientalia Generalia R14560-2/Bd, 7.

attempt to demonstrate no ill will toward Austria for the annexation of Bosnia, Haladjian Effendi even sought the expertise of Austrian engineers.²⁰⁶

Construction of the Baghdad Railway resumed in earnest in February 1910. With the success of the Hejaz Railway now behind him, Meißner was perceived to have strong ties and popularity with Arabs and was recruited by the Baghdad Railway administration to be the head engineer for the railway's final section in Irak. Telegraph lines were completed between Ereğli and Aleppo, and in early May of 1910, construction of the Adana station and the line in and out of the city broke ground, symbolizing Adana's potential to rejuvenate itself only shortly after the city's nightmarish massacres. The station, a resplendent orientalist structure, marked a significant departure in architectural style, as all stations previously built by the architects from Philipp Holzmann drew upon Teutonic and German vernacular—rather than Turkish or Arabic—idioms. The ceremony had the requisite cast of characters: the local director of the Baghdad Railway Company, the Vali of Adana, and the Mufti, who offered a prayer beneath a marquee adorned with German and Ottoman flags.²⁰⁷

In Adana and elsewhere along the remaining course of the railway, a gambling game of sorts also began to take shape. Turkish speculators feverishly bought parcels of land that they believed might ultimately be necessary acquisitions for the Baghdad

²⁰⁶ HHSa Türkiye, 31 F19, 32 F19. Haladjian Eddendi would eventually be murdered in Diyarbakır in 1915, along with several other prominent Armenians. See "Confirmation from Cairo of the Wholesale Atrocities that Von Bernstorff Belittles," *The London Times*, September 20, 1915.

²⁰⁷ Vice Consul E. C. Donaldson Rawlins to Consul General Eyres, Adana, May 2, 1910, NA FO 406/35, 114.

Railway Company, hoping that they could sell these back for a marked profit.²⁰⁸ Indeed, the Baghdad Railway Corporation did not know precisely where tracks would be laid. Consular reports from the winter of 1910–1911 indicate that the railway’s route through Antakya province and Syria into the Tigris-Euphrates region was formed haphazardly. One major source of contention came from a lingering Hamidian fear of attack by water. Most since Pressel and Chesney saw the port of Alexandretta (İskenderun) as a necessary station, as the railway could more thoroughly thrive with a trade connection in the Mediterranean. But many also feared that a coastal route would make the railway susceptible to attack by the British naval machine in the Mediterranean.²⁰⁹ Ultimately, it was decided to construct a branch line connecting Alexandretta to Toprakkale, which afforded a connection to the Mediterranean without compromising the integrity of the entire line.

Real estate speculation functioned on a macro level as well. In August 1912, the Austrian reporter Robert Deutsch and the Anglo-Austrian orientalist, soldier, and administrator of the Sudan, August Slatin (1857–1932), made a public appeal in Austria for the development of a railway in the Yemen that would interlock with the Hejaz railway and expand its function beyond the religious to include commercial purposes.²¹⁰ The project went nowhere in İstanbul. Ottoman officials were, however, pursuing another

²⁰⁸ Vice Consul E. C. Donaldson Rawlins to Sir G. Lowther, June 22, 1910, NA FO 881/9729, 135–36.

²⁰⁹ NA FO 881/9729 and 881/9842.

²¹⁰ HHSa 2012 Karton F-19-33 Eisenbahnen Türkei.

potential expansion, this one to the Black Sea, and they began discussions on the matter with Russian officials in 1913.²¹¹

Railways were also becoming a more integral part of the urban fabric. Already in 1875, the Tünel underground railway in İstanbul funded by British investors and connecting Galata to Pera was inaugurated and became the world's second underground subway.²¹² By 1904, an American team expanded on a previous proposal by Eugène-Henri Gavand (fl. 1870-1880) to connect İstanbul's European shore at Sarayburnu to its Asian shore at Üsküdar.²¹³ Although the project was ultimately rejected, it highlighted a lingering fantasy that rail would somehow surmount the mighty Bosphorous.

While the penetration of the Taurus and Amanus Ranges remained the primary engineering difficulty for the remaining Baghdad Railway, administratively it was the work in Iraq that was the most challenging. Drawing upon his experience in the Hejaz, Meißner made a resolute decision to minimize the number of Christians hired for the railway's construction. The region's largely nomadic population was considered to be a threat to the construction process, and the nomads were also the very subjects that the railway needed to domesticate. Meißner drew comfort from the fact that Bedouin populations in Egypt had, to a fairly large degree, settled in and taken up agriculture as a result of the railway. While Meißner had express faith that the Arab could "prove himself

²¹¹ BOA A.DVN. Gömlek 804 Tarih 1 Belge Adedi, 203–94.

²¹² Zeynep Çelik, *The Remaking of İstanbul: Portrait of an Ottoman City in the Nineteenth Century* (Berkeley: University of California Press, 1993), 98–99.

²¹³ Ibid., 99–102. See also Gavand's original proposal in Eugène-Henri Gavand, *Chemin de fer Métropolitain de Constantinople, ou Chemin de Fer Souterrain de Galata à Péra, dit Tunnel de Constantinople: Projet d'une Nouvelle Ville et d'un Nouveau Port de Commerce à Constantinople* (Paris: Charles Lahure, 1876).

as a farmer and a laborer,” the American consulate in Irak articulated a sociopsychological concern in January of 1913:

it [is not] fair to judge the latent capabilities of these people by their present habits, when for centuries they have had no inducement to work more than necessary to supply their immediate, pressing wants. The sheikhs get the lion’s share of the returns from labor, and to enable him to progress, the Arab must be freed from ... tribal organization.²¹⁴

Despite ample delays—even inabilities—in processing the workers’ wages, the construction in Irak, including the challenging crossing of the Euphrates, progressed well under Meißner’s direction.²¹⁵ But with the Iraqi politician Sayid Talib al-Naqib’s rallying call for Iraqi Arabs to rise up against their Ottoman administrators in March of 1913, construction efforts in Irak were hampered until Talib and the CUP agreed to negotiate a workable political compromise.²¹⁶

Ottoman records indicate another hindrance to construction that was, perhaps, less expected than irredentism: dangerous animals. Because the majority of the railway’s construction lay far outside of populated areas, wild animals had emerged as an increasing threat to the safety and well-being of railway workers, so much so that by 1914, the Ministry of the Interior was confronted with a request from the railway officials to arm its guards with rifles.²¹⁷ This had become particularly urgent on the line connecting Adana to Mersin, where woods were thickly populated with hyenas, wolves, jackals, and even tigers. There was, of course, an inherent danger in rifles proliferating on work sites, given the frequent scuffles among workers and between workers and

²¹⁴ Ba R901/6688, 183.

²¹⁵ BOA T-NFİ 1373/19 (23 Ca 1328).

²¹⁶ Bagdad-Eisenbahn-Gesellschaft, *Jahresbericht 1913-1914*, Ba 80 Ba 2, Deutsche Bank #8302, 35.

²¹⁷ BOA DH-EUM-MTK 76/6 (8 Ca 1332).

engineers. But the discussion in April 1914 was cognizant of more complex matters. The officially stated purpose of the rifles was “for reasons of self defense [*hayvanat-ı vahşiyye*] and the like.”²¹⁸ The word “vahşi”—modifying the word for “animal”—was in fact a common adjectival modifier for criminals who eluded or evaded authorities, and it has been argued that this description was also meant to protect the railway’s interests in regional timber from common timber smugglers.²¹⁹

Things were also shaky at the other end of the empire. Neophyte governments comprising the Balkan League—Bulgaria, Macedonia, Serbia, and Greece—were still not satisfied with territorial arrangements in the Balkans, and the dissatisfaction boiled over in October 1912, when the league declared war on the Ottoman empire. Although the Porte directed all of its attention to the war, this did not, to any material degree, affect progress on the railway’s construction—which was operating far away and under German management. By the end of the war in May 1913, the Ottoman empire had lost all of its European territories west of Çatalca, a hamlet directly west of İstanbul. Still dissatisfied with the territorial arrangements, Bulgaria immediately declared a second Balkan war on its former allies Serbia and Greece in June 1913. Before the war ended two months later, the Ottoman and Romanian governments took advantage of the infighting to regain some lost territory. The Ottoman empire’s northwest frontier now lay just outside of Edirne. Albania, long a stronghold of the Empire, had been lost for good. Eleven days after the second war ended, fearing yet more irredentist elements, the Ottoman empire signed the

²¹⁸ “Railroads, Rifles, and the Most Dangerous Animal of All in 1914 Adana,” *Tozsuz Evrak*, August 13, 2012, <http://www.docblog.ottomanhistoriespodcast.com/2012/08/railroads-rifles-and-most-dangerous.html>.

²¹⁹ Ibid.

Anglo-Ottoman Convention, which officially relinquished Kuwait as an autonomous region. This arrangement again placed the Baghdad Railway project on a direct course for confrontation with the British, reigniting the question of the railway's terminus on the Persian Gulf.

Amidst the political chaos of the Balkan and Iraqi fronts, a portrait of the Baghdad Railway on June 28, 1914, reveals both the fortitude of the Ottoman government and its German management and the intrinsic geopolitical problems of its very perpetuation. The railway lay in four unconnected segments. In Anatolia, the rails dead-ended at Bulgurlu, as the Taurus Mountains were still to be penetrated. Yet on the other side of the mountain, the railway had made good progress and ran all the way from Durak, where the Cilician Plain meets the Taurus Range, to Osmaniye at the western edge of the Amanus (Nur) Mountains (this line also connecting to the branch line to Alexandretta and the Mediterranean). West of the Amanus range, the rail ran from Rajo to Tell Abyad near Akçakale, with a major connection at Aleppo in between. In Irak, construction on the line had recently broken ground and extended from Baghdad to sixty kilometers north, near to present-day Baqubah. On June 28, Gavrilo Princip, a Serbian nationalist, assassinated Archduke Franz Ferdinand of Austria (1875–1914) and his wife Sophie, Duchess of Hohenberg (1868–1914)—which rapidly led to a series of events culminating in the world's first “Great War.” The German railway activities in the Ottoman empire could no longer assume, for international observers, an innocent countenance as merely a lifeline of disinterested and technicalist transmutation. Rather, and almost overnight, the railways of the Ottoman empire became deeply symbolic of a geopolitical and teleological machination that stood, without a shadow of a doubt, in

direct confrontation with all of the powers around it. The idea of the line—extending from Berlin to Baghdad—also served as the line in the proverbial sand for the nations who stood with or against the German-Ottoman collaboration and would play a critical role, both literally and psychologically, in the astonishing events of the next five years.

1.8 The Rush to Connect: The Baghdad Railway and the Great War

Just five days after Austria-Hungary declared war on Serbia on July 28th, 1914, the German government, anticipating that it might wind up fighting a war with its ally, entered into a secret alliance with the Ottoman empire.²²⁰ With the growing possibility of a full-fledged European war ramping up over the course of the summer of 1914, the Baghdad Railway Company witnessed a precipitous drop in its workforce in the Taurus Mountains, Irak, and Zor province by the time Germany declared war on Russia on August 1st, in defense of Austria-Hungary against Russia's pledge of support to Serbia. All but the most senior German officials and engineers were either recalled to Germany for military service or stationed elsewhere in the Empire, as necessitated by strategy. On November 1st, the Ottoman empire officially entered the war on the side of Germany and Austria-Hungary, and drafts within the empire forced many workers to abandon labor on the railway and begin military preparations and service. By November, Britain had declared war on Germany, Germany had declared war on France, Japan had declared war on Germany, and Russia, Britain, and France had declared war on the Ottomans. The numbers in the sections of the railway based in Adana and Aleppo paint a clear picture: in

²²⁰ Finkel, *Osman's Dream*, 527.

August 1914 the Baghdad Railway Company had 11,796 employees, while just one month later it had only 1,651.²²¹

In close consultation with German and Austrian officials, the Porte issued by way of Mehmed V an unprecedented series of five *fetvas* of jihad on all Christians in the empire who were not German or Austrian, an ordinance widely publicized in Turkish and Arabic publications across the empire on November 14, 1914.²²² [Fig. 1.33] The call to holy war was framed not so much in terms of the war at hand but rather as an altruistic call to defend the Muslim brethren oppressed by the colonial regimes of Britain and France—which is, again, deeply ironic given the fact that Germany had Muslim colonial subjects in German East Africa. Regardless, the language of the circulated Arabic pamphlet minces no words:

The killing of the infidels who rule over the lands has become a sacred duty, whether it be secretly or openly, as the great Koran [sic] declares in its word: ‘Take them and kill them whenever you come across them.’²²³

Sean McMeekin has argued that the unflagging German propaganda was entirely consonant with the concept of jihad and that the jihad of 1914 was, in fact, German in its essentially *realpolitisch* (as opposed to ideological) nature. A British spy put it this way:

German inspiration is clearly seen in the thoroughness and unscrupulousness of the method, as well as in the lack of comprehension of social and human principles, and the imperfect reading of the mind and the temper of other people.²²⁴

²²¹ McMurray, *Distant Ties*, 115.

²²² McMeekin, *Berlin-Baghdad Express*, 123–37.

²²³ Ibid., 123. Jihad pamphlet submitted to Morgenthau by J.B. Jackson from Aleppo, April 8, 1915, NA M 353, Roll 6.

²²⁴ AA R14, 162.

Jihad was historically an uncompromising axiomatic concept, but it was of course imperative to qualify the plea in order to protect the other members of the alliance (the Central Powers) still residing within the Ottoman empire and to make clear that this global jihad was one with significant, if not incredibly convoluted, caveats. The fatwas, as such, came with an extremely important qualifier, which was that German and Austro-Hungarian nationals were to be spared and in fact revered as “defenders” of Islam.²²⁵ Mehmed’s military fatwas also presented complications concerning their applicability to Christians who came from nations that were not involved in the war (at least not yet), namely Swiss, American, and Scandinavian expatriates. Moreover, they presented a massive problem as they applied to internal Christian minorities. Finally, and most tellingly, they posed a unique quandary as they pertained to Italians, whom the Central Powers were courting for their alliance and who nonetheless had millions of their own Muslim colonial subjects in Libya.

Max von Oppenheim was enlisted to clarify the fatwas and prevent them from manifesting the complete Pandora’s Box that they were in reality. He described them as a “jihad by campaign” that articulated that the jihad, while Islamic in nature, was an extension of the Caliph’s wishes to defeat the French, British, and Russians and that if Italy were to join on their side, it would be included as well.²²⁶ But this inevitably caused confusion in the mix of panic, hysteria, and excitement about the war. In Aleppo, for example, Austrian residents were deported along with their French and British neighbors. Continuous clarification of the fatwas and ensuring their proper application became a

²²⁵ For a synoptic of the *fatvas* see McMeekin, *Berlin-Baghdad Express*, 123–37.

²²⁶ *Ibid.*, 125.

major project in itself during the early stages of the war, and they held particular significance for the multinational character of the Baghdad Railway Company, even in its emaciated state.

At first, the railway and its completion to Baghdad were of secondary importance to the greater matter of war. The railway was initially considered as an existing resource rather than as one to be developed. Austrian war records from 1915, for example, enumerate the ways in which the railway network's stations and facilities could function primarily as a network for accommodations, communications, and resources such as food and water for troops.²²⁷ [Fig. 1.34] But in the early months of that year, the German general staff tapped the expertise of the journalist and oriental philologist Ernst Jäckh (1875–1959) to recommend a more strategic use of the railway.²²⁸ Jäckh's main advice was simple: to complete the railway to Baghdad as soon as possible, for without it, the war efforts on the crucial Ottoman front would be hampered and undoubtedly overrun by British and Russian forces from three of the empire's four sides. This new strategy also forced the German Foreign Office and the Porte to assume a tighter relationship with the Baghdad Railway Company. As one Ottoman daily depicted it, the Kaiser, now keenly following the railway's progress, was feverishly trying to “sew” the empire together.

[Fig. 1.35]

In the spring of 1915, Arthur von Gwinner met with Mehmet Cavit Bey (1875–1926), a CUP leader, to discuss arrangements for swift completion of the railway. Cavit agreed to continue to match German contributions for the railway's construction but also

²²⁷ OKa GST TB908.

²²⁸ McMurray, *Distant Ties*, 116.

laid down enormous stipulations, including German responsibility for all subsequent freight charges and a large subsidy.²²⁹ The Porte, in turn, promised to replenish the workforce, particularly in the Taurus and Amanus ranges where the most work remained to be done.²³⁰ The railway effectively became a total military operation. To underscore this, the official designation for railway personnel in administrative documents was changed from “worker” to “soldier” in October 1916.²³¹

This shift in the function of the railway brought with it a new range of both actors and operative needs. The Porte quickly reckoned that it simply did not have any able-bodied men of its own to spare from the battlefronts in the Balkans, the Turkish-Russian border, and the Sinai Peninsula for the completion of the railway. There was, however, a new resource: prisoners of war. Between 1915 and 1918, several thousands of soldiers from the opposing powers were captured and forced into the railway labor camps, primarily at Beledik in the Taurus Range. Nationals from Britain, Australia, New Zealand, India, Russia, and France, in addition to native Armenians and Greeks seeking refuge from persecution, were all documented as workers at some point. [Fig. 1.36] Despite being prisoners of war, the workers were generally treated comparably to Ottomans in terms of wages and hours, perhaps in small part due to the presence of the Red Cross and the Red Crescent, who carefully and methodically reported on the working conditions at Beledik.²³² In some instances, captive railway workers started football

²²⁹ Ibid.

²³⁰ Ibid., 117.

²³¹ Ibid., 121.

²³² NA FO 383/335.

clubs and celebrated birthdays with small feasts, something known largely from the intercepted correspondence these workers wrote to their families. The ability of the Armenian workers, primarily young intellectuals and students from the empire's larger cities, to commiserate within the work camps was limited by a constant fear of their Turkish comrades and the local Turkish police.²³³

While the railway's multinational quality was unwittingly enhanced by the preponderance of prisoners, it also received a tragic blow from the renewed persecution of Armenians in 1915. Echoing the fears that prompted the Adana massacres, Talat Pasha (1874–1921), Minister of the Interior, Enver Pasha, and other Ottoman generals issued a series of campaigns against Armenians over the course of the year because of what has been described as their profound suspicion that Armenians would side with the Russians and destroy the empire from within. This baseless claim cost the lives of hundreds of thousands of Armenians over the following years, and the Armenian railway workers, who had long held privileged semi-skilled positions in the railway's construction, were forcibly deported along with many of their fellow nationals from communities along the railway's path, on the very railway they had helped to build.²³⁴

The first in a string of major blows to the might and morale of the Central Powers came in February 1915 with a failed attack on British and Egyptian forces at Suez.²³⁵ The Baghdad Railway Company and the Porte recruited Meißner Pasha away from his role in

²³³ See the breathtaking memoirs of Grigoris Balakian, an Armenian refugee who worked briefly at Beledjik in 1917 and who described his and his colleagues' condition in vivid detail: Grigoris Balakian and Peter Balakian (trans.), *Armenian Golgotha* (New York: Alfred A. Knopf, 2009), 311–46.

²³⁴ McMurray, *Distant Ties*, 121.

²³⁵ McMeekin, *Berlin-Baghdad Express*, 166–79.

Baghdad to the Sinai peninsula, where he was asked to lead the rapid clandestine construction of a railway across the peninsula in order to place the Ottomans in a position to potentially attack the canal again with greater force and control the important strait once and for all. This new project added to the labor deficit, and the Central Powers advertised positions across their empires to attract men who had not yet been conscripted for labor. Many applied, particularly Europeans desperately trying to flee the chaos on the continent, and the understaffed Baghdad Railway Company had difficulty keeping up with the volume of applications.²³⁶

Railway labor in turn ramped up, and a flurry of activity led to the openings of a number of sections. In July 1915, the Amanus mountains were successfully penetrated and service was extended to İslahiye, while construction progressed eastward in Syria to Ras al-Ayn.²³⁷ In November 1916, after nearly a decade of stagnation, the seemingly impenetrable Taurus Mountains were finally bored through.²³⁸ By March 1917 the new Sinai railway reached Rafah, where it would be able to connect with the Palestinian railways.²³⁹ Finally, in October 1918, despite all but impossible prospects for a Central Powers victory, the Taurus stretch went into full operation and made it possible (in theory) to travel 1,237 kilometers from İstanbul to Nusaybin. All that remained for

²³⁶ McMurray, *Distant Ties*, 121.

²³⁷ Erika Preissig and Günther Klebes, "Eisenbahnbau und Eisenbahnprojekte im Orient und die damit verfolgten wirtschaftlichen und politischen Ziele," *Jahrbuch für Eisenbahngeschichte* 21 (1989): 56.

²³⁸ *Zentralblatt der Bauverwaltung*, no. 105 (1919): 627.

²³⁹ Hugh Hughes, *Middle East Railways* (Harrow, UK: Continental Railway Circle, 1981), 37.

reaching Baghdad (again, in theory) was the 492-kilometer stretch from Nusaybin to Samarra.²⁴⁰

These were only theoretically possibilities because the flurry of construction on the German and Ottoman side occurred side-by-side with the tumult of war and Britain's primary interest in sabotaging the Ottoman rail network. No single figure in history better personifies this countereffort than T. E. Lawrence (or "Lawrence of Arabia"; 1888–1935), the British officer who, supported by the deep trust of Arab irredentists within the Ottoman empire, planned the systematic destruction of the Hejaz Railway from 1915 onward as part of a greater effort to promote an Arab uprising and sponsor Arab nationalism. In March 1917, the British captured Baghdad, bringing into question the ultimate utility of the railway's penetration of the sparsely populated desert beyond Anatolia. In December 1917, the Porte surrendered Jerusalem to the British. Finally, on September 6, 1917, a fire in Haydarpaşa destroyed a massive arsenal of German and Turkish artillery, killing up to 1,000 people.²⁴¹ While the evidence remains inconclusive about who began it, the fire is generally considered to be the work of a stealth allied attack on the ground. As McMurray has recounted, the blasts "blew out windows in homes in Pera," miles away on the other side of the Bosphorous.²⁴² The disfiguring of the

²⁴⁰ *Zentralblatt der Bauverwaltung*, no. 105 (1919): 628.

²⁴¹ Accounts of how many people perished in the fire vary. The highest number, reported by Wilfred Castle, is 1,000, although 600 appears to be a more commonly accepted estimate. See Wilfred Castle, *Grand Turk: An Historical Outline of Life and Events, of Culture and Politics, of Trade and Travel During the Last Years of the Ottoman Empire and the First Years of the Turkish Republic* (London: Hutchinson, 1943), 102; and Ekrem Çakıroğlu, *Yaşamları ve Yapıtlarıyla Osmanlılar Ansiklopedisi* (İstanbul: YKY, 1999), 96.

²⁴² Trautsmendorff to [illegible]. September 11, 1917, HHSa Liasse 63. See also Michael Reynolds, *The Ottoman-Russian Struggle for Eastern Anatolia and the Caucasus, 1908–1918: Identity, Ideology and the Geopolitics of World Order*, vol. 1 (PhD diss., Princeton University, 2003), 306.

station, the centerpiece of a half-century German-Ottoman enterprise, resonated well beyond Pera.

The Ottoman empire withdrew from war with the Armistice of Mudros on October 30, 1918, accepting its defeat. Mehmed VI (r. 1918–1922), who had assumed the Ottoman throne after his brother died just months before the war’s end, remained in İstanbul and faced a highly uncertain future. On November 18, 1918, an armistice between Germany and the Entente Powers was signed, sending Kaiser Wilhelm into exile in Holland. With the Treaty of Versailles in June of the following year, the war officially ended and the Ottoman railways were placed under temporary British control.²⁴³ With the Treaty of Sèvres in 1920, the Ottoman empire officially lost its Arab territories, and the Allied Forces’ designs on them—which had begun with the Sykes-Picot agreement of 1916—were made manifest. The Allied Forces also partitioned the administration of a large swath of Anatolia because the Turkish National Movement, led by many of the former leaders of the CUP, including Mustafa Kemal Atatürk (1881–1938), sought to abolish the throne and establish a secular state in the Turkish War of Independence. By 1923, the formerly Ottoman railway network lay in a broad swath of land spanning three continents and twelve distinct political entities (six nations: Romania, Bulgaria, Yugoslavia, Greece, Arabia, and Turkey; and five mandates: Syria, Lebanon, Palestine, Trans-Jordan, and Iraq). The Baghdad Railway alone, the only unfinished portion, spanned three distinct territories: the British mandate of Iraq, the French mandate of Syria, and the occupied imperial Ottoman territories. On October 20, 1921, with the signing of the Treaty of Ankara, the railway played its last geopolitical role in defining

²⁴³ McMurray, *Distant Ties*, 138.

the border between French Syria and a coalescing Turkey, a border that remains to this day. The Turks retained the railway from Çobanbey to Nusaybin, and the border between the two states was drawn five meters to its south for a remarkable stretch of 350 kilometers. On October 29, 1923, the Turkish Republic was proclaimed through the Treaty of Lausanne and Ankara was chosen as the nation's new capital. Despite the fact that there was no longer a dire need for a rail link between Nusaybin and Samarra, effectively connecting Turkey to the French and British mandates of Syria and Iraq, the French and the British nonetheless collaborated to complete the link. In 1940, with the world yet again at war, a train made the long journey from Baghdad to Haydarpaşa for the very first time.²⁴⁴

By this point, the importance—if not the necessity—of railway infrastructure on a global scale was more than self-evident, and networks proliferated at breakneck speed. Proportionally, much of the euphoria and sanguineness that celebrated the nature of its modernity decelerated, and it became quotidian. So too did the uniqueness of non-colonial transnational exchanges of knowledge, expertise, and technology. The nation state, the mandate, and even the colony increasingly had mankind's most crucial human and natural resources within their reach, and as a result, grand—even visionary—ideas such as a railway from strait to gulf emerged as problems simply to solve and things to build. The Ottoman rail network—coalesced around vision and constituted through political cunning and geostrategy—is an instructive and archetypal episode in modernity's early transition from the realm of ideas to the realm of nations, from the dream and the drawing board to the soil and the spade.

²⁴⁴ Ibid.

CHAPTER 2: GEOGRAPHY

The Turks are the Germans of the East as the Greeks are the French.¹

—Karl Kannenberg

2.1 Friedrich Ratzel and the Mutability of German Geography

The key tenet of Humboldtian geography that drove the necessary knowledge production of the Ottoman railway network—that the world can only be understood through close physical inspection—as well as its relativist implications that made every place (*Land*) and all people (*Leute*) part of an undifferentiated cosmic system of equals was more or less anathema to the political objectives of a unified Wilhelmine Germany. Because Germany was fashioned as a distinctly cultural nation intent on projecting its distinct culture abroad, geography, as it was forged by Alexander von Humboldt (1769-1859) and understood by his earliest interpreters, could not scientifically substantiate the merit of the Wilhelmian *Weltpolitik*, mostly because it had no means to assign value to the intangible quality of culture.² Nonetheless, Humboldt's legacy and his writings proved malleable enough to morph into a new science that could do this. This science was geopolitics, a science whose fixation on the abstract world of maps, conceptual systems, and diagrams most certainly departed from the primacy Humboldt placed on the natural world. At the same time, however, geopolitics wore its indebtedness to Humboldt on its sleeve, in its curiosity about the entire world and not merely a part of it.

¹ “Die Türken sind die Deutschen des Orients, wie die Griechen die Franzosen des Orients.” Karl Kannenberg, *Kleinasien Naturschätze* (Berlin: Verlag von Gebrüder Borntraeger, 1897), ix.

² An excellent summary of the broad changes in German foreign policy during the time of Wilhelm II can be found in Konrad Canis, *Von Bismarck zur Weltpolitik: Deutsche Außenpolitik 1890 bis 1902* (Berlin: Oldenbourg Akademieverlag, 1999).

In his metabiography of Humboldt, Nicolaas Rupke noted two institutions in the Wilhelmine period that engaged Humboldt's legacy: the Monist movement and the University of Leipzig.³ The latter was home to a fascinating constellation of scholars commonly associated with the humanities whose orbit circled largely around the controversial Karl Lamprecht (1856–1915), a cultural historian who viewed history as the study of political events as much as it was a window into the nature of human psychosocial relations and the relative qualities of one culture compared to another.⁴ One of these scholars was Friedrich Ratzel (1844–1904), geographer, ethnographer, and professor at the university.⁵

Ratzel is considered by many to be the godfather of numerous new strains of geographic science.⁶ Two that are important relative to this study are cultural geography and geopolitics, along with Ratzel's concept of "diffusionism," which he applied across his immense body of work. A handful of insightful studies in the German language

³ Nicolaas A. Rupke, *Alexander von Humboldt: A Metabiography* (Chicago: The University of Chicago Press, 2008), 58. For an extended consideration of Humboldt's connection to monism, see Nicolaas Rupke, "Alexander von Humboldt and Monism," in *Monism: Science, Philosophy, Religion, and the History of a Worldview*, ed. Todd H. Weir (New York: Palgrave Macmillan, 2012), 71–90.

⁴ For a history of the pioneering development of geography at the University of Leipzig, see Hans Richter, "Umfeld, Umbrüche und wissenschaftliches Profil des Geographischen Instituts der Universität Leipzig von 1871 bis 1996," in *Geographie in Leipzig: Tradition und Neubeginn*, eds. Alois Mayr and Helga Schmidt (Leipzig: Institut für Länderkunde, 1998), 18–49. Regarding Lamprecht, see Ines Mann and Rolf Schumann, *Karl Lamprecht: Einsichten in ein Historikerleben* (Leipzig: Akademische Verlagsanstalt, 2006).

⁵ The most comprehensive biographical source on Ratzel is Günther Buttmann, *Friedrich Ratzel: Leben und Werk eines deutschen Geographen 1844–1904* (Stuttgart: Wissenschaftliche Verlagsgesellschaft, 1977).

⁶ See, for example, Brian Blouet, *Geopolitics and Globalization in the Twentieth Century* (London: Reaktion Books, 2001), 28–29; Gearóid Ó. Tuathail, *Critical Geopolitics* (London: Routledge, 1996), 28–29.

literature have addressed Ratzel's work, but they typically work backward from post-WWI events with a certain amount of teleological instrumentalization. Some scholars attempting to historicize the field of geopolitics as well as cultural geography cite certain of Ratzel's works as perhaps *the* formative texts.⁷ Even more common, however, is the teleological arc drawn between Ratzel's unique concept of *Lebensraum* (living space) and its interpretation in Nazi geography and eugenics.⁸ However, both frameworks for understanding Ratzel's work do it a historical disservice. His fascinating writings are mainly relevant for what they reveal about their time and about the radically shifting nature of the science of geography after Humboldt and his treatises and concepts are better understood in concert than in isolation. Ratzel is by no means the only figure through whom Wilhelmine geography can be traced, but he is certainly the most important, and it is possible to interpolate from his works much of Theodor Wiegand's conception of geography as a science to which the German engineers of the Ottoman railway could make a contribution.

Ratzel's approach to geography took shape in his earliest full-length study, a descriptive tome on the *Land* and *Leute* of the United States entitled *Die Vereinigten*

⁷ Ratzel's most important publications include *Anthropogeographie* (Stuttgart: J. Engelhorn, 1882); *Völkerkunde* (Leipzig: Bibliographisches Institut, 1885); *The History of Mankind* (London: Macmillan, 1896); and *Politische Geographie* (Munich: R. Oldenbourg, 1897). Ratzel's writings on North America have been compiled in Stewart A. Stehlin, ed., *Sketches of Urban and Cultural Life in North America* (New Brunswick, NJ: Rutgers University Press, 1988).

⁸ Ratzel first coined the term "*Lebensraum*" as part of a study that analogized the state as a biological entity and that conceived of certain states as entities whose "living space" was insufficient for their "biological" means. See Friedrich Ratzel, *Der Lebensraum: Eine biogeographische Studie* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1901). The concept gained a great deal of currency in German academic circles during the following decades, including its use by Karl Haushofer (1869–1946), a geographer for the third Reich who construed the term as one that would "scientifically" buttress rationalizations for the invasion of Poland in 1939 and, eventually, the systematic extermination of European Jews.

Staaten von Amerika and published in 1893.⁹ In this study, Ratzel paid special attention to the Germans who had emigrated to the United States and the places where they had settled, particularly Pennsylvania and the Midwest. Ratzel's study appraised the German immigrants' ability (as well as their desire) to sustain German cultural traditions within the foreign culture and, in some isolated instances, their ability to make a direct cultural impact on the host culture itself. Like so many other European visitors to North America in that day, Ratzel was fascinated by the concept and the reality of the American frontier, which for him represented a spatial boundlessness that suited the intrepid qualities of its settlers but even more importantly served as a spatially ideal model for a society whose settled borders, which formed an expanding growing organism, were (ostensibly) consonant with its needs.¹⁰ The organic nature of the American spatial frontier inspired what Ratzel would call "anthropogeography," a framework for considering geography culturally, as a system that is not tied to deterministic conditions such as climate but rather to the agency as well as the caloric needs of its inhabitants.

This concept resonated tremendously back home in the newly unified German empire which had, to use the biological analogy, coalesced from an array of tiny organisms into one great single organism whose size, relative to its population, nonetheless seemed insufficient and delimited. How Ratzel's organic theories would be utilized was of course beyond his control, but they did have immediate relevance to the German-Ottoman relationship, as they helped rationalize seeing the borders of other contiguous polities as malleable, penetrable, and frontier-like. France and Russia were

⁹ Friedrich Ratzel, *Die Vereinigten Staaten von Amerika* (Munich: R. Oldenbourg, 1893).

¹⁰ As formulated in Ratzel, *Anthropogeographie*.

perhaps too strong to be considered part of the realm of possibility here, and the Nordic countries were not particularly useful because a body of water separated them from the Empire. In this context it is crucial to note the German empire's consideration of what lay to the southeast, and certain historical developments can speak to the area's particular significance.

First, the 1879 Dual Alliance (*Zweibund*) with Austria-Hungary forged an official and profoundly important alliance with the Habsburg crown, which, despite centuries punctuated by adversarial episodes with the German lands, shared a number of interests arising from their Central European geographic location, as well as the ability, not negligible, to communicate in the German language.¹¹ With the Habsburg crown a guaranteed sister state, Kaiser Wilhelm's rejection of Bismarckian isolationism, particularly with respect to matters in the southeast of Europe, is even more understandable. Through symbiosis and cooperation, the German and Austro-Hungarian organisms could steadily seek to influence the expansion of the organic *Raum* in the weak Ottoman lands in the way that Ratzel had seen in the American frontier.¹² The railway,

¹¹ For an excellent reflection on the geostrategic aspects of the *Zweibund*, see Peter Theiner, "'Mitteleuropa': Pläne im Wilhelminischen Deutschland," *Geschichte und Gesellschaft: Sonderheft* 10 (1984): 128–48.

¹² It is noteworthy here to compare Ratzel's fascination with the western frontier of North America with a passage by the German geologist Heinrich Edmund Naumann (1854–1927) in which he compares the opening up of the American west with the German opening up of Anatolia. See Heinrich Edmund Naumann, *Vom Goldenen Horn zu der Quelle des Euphrat: Reisebriefe, Tagebuchblätter und Studien über die Asiatische Türkei und die Anatolische Bahn* (From the Golden Horn to the Source of the Euphrates: Travel Letters, Diaries and Studies on Asian Turkey and the Anatolian Railway; Munich: R. Oldenburg, 1893), 438: "Die räumliche Abschliessung Amerikas wirkt darauf hin, die wirtschaftliche Emanzipation seiner Bevölkerung immer intensiver hervortreten zu lassen. Je weiter sich dieses Verhältnis entwickelt, umso mehr sind wir darauf angewiesen, den Verkehr mit unseren östlichen Nachbarn zu pflegen. Der große Weltverkehr wirkt ersehend [?] den Mohammedanischen Heil, der sich Jahrhunderte lang zwischen Orient und Occident festsetzen konnte, um die beiden großen Hälften der alten Welt gegeneinander zuzuschliessen. Der Orientale ist mehr zum Ackerbau geboren als zu etwas

whose biological analogues could be many (spines, veins, etc.), was a clear first step in the process of growth. Because such biological features trumped the importance of state borders in Ratzel's model, the fact that the Ottoman empire (or the Austro-Hungarian empire, for that matter) was not technically "seized" was irrelevant. What mattered most was the fact that, with only the minor incision of the Bosphorus, these lands were contiguous and could theoretically be connected by land-based infrastructures such as rail (with the obvious exception of the necessary ferrying of locomotives and goods across the Bosphorus) [Fig. 2.1].

This was how a German organism could form structurally, but for German *Kultur* to proliferate within the organic structure, methods of transmission were needed. Again, although Ratzel had not suggested an explicit connection between expansionism and the southeastern frontier, his widely transposable concept of diffusionism clearly functioned as a conceptual handmaiden. Woodruff Smith has summarized Ratzel's conception of diffusionism as follows: physical similarities between artifacts and objects can positivistically prove the migration of people, and culture is inherently signified by specific physical traits evident in these objects.¹³ As Marchand has noted, this allows

anderem." (The spatial seclusion of America shall serve to let the economic empowerment of its people emerge ever more intensely. The more this behavior develops, the more we find it instructive to maintain the transportation system with our eastern neighbors. This great world transport system acts clearly for Muslim safeguarding, and the age-old country between Orient and Occident, fixed as the two great halves of the old world, locked in opposition one against the other. The Oriental is more born to farming than anything else. A lively exchange between East and West will have to develop over time.)

¹³ Woodruff D. Smith, *Politics and the Sciences of Culture in Germany 1840–1920* (New York: Oxford University Press, 1991), 140–61. See also Marchand, *German Orientalism*, 228–29. Smith argues: "Ratzel's development of diffusionist concepts actually began even before his Munich years while he was under [Adolf] Bastian's influence in the early 1870s. Although Bastian's anthropology eventually became the prime target of the diffusionists, Bastian (like Waitz) had in fact included a diffusionist element in his discussion of culture. He argues that, to a considerable extent, the actual culture of a *Volk*—the system of folk-ideas developed from

material evidence to turn into history,¹⁴ and because Ratzel's milieu was geography, not history, it had implications that were also patently contemporary. Indeed, Ratzel's diffusionism allowed historians with orientalist interests to trace the history of world religions, particularly in the Holy Land, not merely through texts but also through objects and their slow formal mutations over time.¹⁵ The dissertations Ratzel advised at the University of Leipzig provided credence and depth for diffusionism as a viable scientific and spatial concept and, more broadly, for the study of marginal "oriental" cultures and embedded materialist concerns that made them a valid subject. Some of these read more like dissertations in art history or cultural studies than in geography, for example: Karl Prellberg, "Persien: Eine historisches Land" (Persia: A Historical Land; 1891), Luka Dimitrov, "Bitolja (Monastir): Beiträge zur geologischen und petrographischen Kenntnis des Vitosa-Gebietes in Bulgarien" (Bitola [Monastir]: Contributions to the Geological and Petrographical Knowledge of the Vitosa Region in Bulgaria; 1894), Iwan Iwantschoff, "Lowetsch (Bulgarien): Die primitiven Formen der Gewerbe in Bulgarien" (Lovech [Bulgaria]: The Primitive Form of Crafts in Bulgaria; 1896), and Sedrak

universal elementary ideas—was a result of adaptation to particular geographical areas with distinctive environmental conditions. The study of cultural differences among *Völker* presupposed the prehistoric movement of people into the areas they occupied. Cultural traits brought from elsewhere or found in the new location that were useful in coping with the new environment were presumably adopted into the *Volk's* culture. Thus, part of Bastian's 'comparative genetic' approach to cultural study was supposed to involve some tracing of paths of trait transfer. More important, it also involved laying out the boundaries of 'cultural provinces'—regions that, because of their particular array of geographical features, displayed a high level of similarity in the inhabitants' cultures. This was not the central part of Bastian's theoretical work, and it rested on some rather confused concepts, but it was taken very seriously by many of his followers." (140–41). Ratzel was a leading example of these followers, as was Felix von Luschan, who is further discussed in Chapter 4 in the context of archaeology.

¹⁴ Marchand, *German Orientalism*, 228.

¹⁵ *Ibid.*, 229.

Tarajanz, “Schemata in Transkaukasien: Das Gewerbe bei den Armeniern” (Schemata in Transcaucasia: The Crafts of the Armenians; 1898).¹⁶

Smith has characterized Ratzel and a handful of those who associated with him and his methods in Leipzig and beyond as a part of a “diffusionist revolt.”¹⁷ Because the diffusionist material concept applies to the contemporary world as well as to the historical one, it is necessary to contextualize the concept within the synchronic German foray into the colonial project. Beyond being a relatively late project in the greater European colonial effort, German colonialism forged particularities that seem to be allied with diffusionist principles and to have resonated for the likes of Carl Peters. German colonial law, for example, was the only law to expressly prohibit the interracial marriage of German colonists with natives.¹⁸ This demonstrated a desire in the proper German colonies of Africa, China, and the Pacific for cultural diffusion as opposed to hybridity, a preference with ramifications for everything from marriage laws to the appearance of colonial buildings [Fig. 2.2]. Ratzel’s immediate focus on issues of “settlement” as a product of his continuous biological analogy of the state was, however, more concerned with the lands adjoining the “*Heimat*.” In his 1898 volume *Deutschland: Einführung in die Heimatkunde* (Germany: Introduction to the Study of the Homeland), Ratzel implored Germans to abandon their historical and particular allegiances to duchies, diets, and bishoprics and instead to consider everything between the Rhine and the Vistula as

¹⁶ UL PA, 830.

¹⁷ Smith, *Politics and the Sciences*, 140–61. See also Christopher Lloyd GoGwilt, *The Fiction of Geopolitics: Afterimages of Culture, from Wilkie Collins* (Palo Alto, CA: Stanford University Press, 2000), 22–23.

¹⁸ Conrad, *German Colonialism*, 3–4.

home.¹⁹ Defining such geographic parameters was rare for Ratzel, and he would not do this after 1898. While the river-to-river concept was most certainly polemical, Ratzel's work and its effects on thinking about colonialism and expansion were, in fact, far more evocative at the level of the abstract biological analogy, replete with its suggestiveness of continental expansionism well beyond the Vistula.²⁰

As much as the Ottoman railways can be seen as an exemplar of Ratzel's thinking at the time, his thinking also had precedents in historical events of the nineteenth century that suggest that the internal migration/colonization ideology had already been a practice involving major efforts of modern infrastructure. One such example was the Hannoverian and Prussian colonization of the fens of East Friesland, a marshy expanse of land that was remarkably difficult to live on but that, with canalization and agricultural development, could offer valuable, reliable crops like peat and buckwheat.²¹ Colonists from a variety of German states settled side by side and coalesced a "High Moor" culture that testified to the economic as well as the cultural success of the notion of Rhine-Vistula migration.²² The nationalization of German culture and migration before unification also owed a great deal to a significant work in 1854, incidentally titled *Land und Leute*, by the folklorist Wilhelm Heinrich Riehl (1823–1897), who demonized urbanization as the end of

¹⁹ Friedrich Ratzel and Richard A. Buschick, *Deutschland: Einführung in die Heimatkunde* (Leipzig: F. W. Grunow, 1898), 314. See also Marchand, *Down From Olympus*, 172.

²⁰ See Paul N. Hehn, *A Low Dishonest Decade: The Great Powers, Eastern Europe, and the Economic Origins of World War II, 1930–1941* (New York: Continuum, 2002), 118–34. Hehn discusses *Lebensraum* and the geographic rationale of Nazi expansion and, in particular, the opportunities the Third Reich saw in German southeasterly expansion toward the Ukrainian steppe, a fecund yet underdeveloped area not unlike the Konya Plain.

²¹ See David Blackbourn, *The Conquest of Nature* (New York: W. W. Norton, 2006), 157–61.

²² See Ferdinand von Bodungen, *Ueber Moorwirtschaft und Fehncolonien* (Hannover: F. Brecke, 1861).

völkisch culture and instead argued that it was the agricultural landscape, ever in need of organic growth, that symbolized what was essentially German.²³

One concrete connection between Ratzel's work and the constellation of German engineers and orientalists engaged with the construction of the Ottoman railway is found through Max Von Oppenheim. Records reveal that in September 1910, a Dr. Karl Weule (1864–1926), another Leipzig geographer and a student of Ratzel, wrote to von Oppenheim asking him to review Ratzel's 1885 text *Völkerkunde* in preparation for a second edition, specifically seeking his knowledge for any updates on the "Mediterranean–North African–West Asian" cultural circles, and Oppenheim obliged three months later.²⁴ In his note, Weule alluded to the fact that Ratzel's work had been so ambitious and all encompassing that the success of its results necessarily varied. Weule relied on people like von Oppenheim to update and verify, in an open source fashion, Ratzel's geographic treatise and implicated him and potentially some of his railway-affiliated peers in the endeavor in one way or another.

The template for Ratzel's *Völkerkunde* was scientific in principle, but the Mediterranean–North African–West Asian cultural circle represented something very different in 1910 than it had in 1885. The intervening quarter century was, as noted earlier, marked by the abandonment of Bismarckian isolationism and the late, yet significant, German foray into the colonial arena following the Congo Conference. Geographic and descriptive studies of German colonies in Africa, such as Richard Deeken's *Die Auswanderung nach den deutschen Kolonien unter Berücksichtigung der*

²³ Wilhelm Heinrich Riehl, *Land und Leute* (Stuttgart: J. G. Cotta, 1854).

²⁴ Prof. Dr. Karl Weule to Max von Oppenheim, Leipzig, September 30, 1910, SOHa Oppenheim Nachlass MvO Nr. 21, 40.

*wirtschaftlichen und klimatischen Verhältnisse*²⁵ (The Emigration to the German Colonies with Respect to the Economic and Climatic Conditions), Karl Krüger's *Die deutschen Kolonien: Erdkundliche Umrissse und Characterbilder von unseren überseeischen Schutzgebieten*²⁶ (The German Colonies: Geographical Outlines and Character Sketches of our Overseas Protectorates), Heinrich Leutz's *Die Kolonien Deutschlands, Ihre Erwerbung, Bevölkerung, Bodenbeschaffenheit und Erzeugnisse*²⁷ (The German Colonies, Their Acquisition, Population, Geology and Products), L. Sander's *Die deutschen Kolonien in Wort und Bild*²⁸ (The German Colonies in Word and Image), and Berthold Volz's *Unsere Kolonien: Land und Leute*²⁹ (Our Colonies: Land and People), instrumentally applied methods unique to the science of geography to the new German colonies for a fuller understanding of precisely who and what they were ruling.³⁰ However, the southern and eastern Mediterranean, von Oppenheim's region of expertise, was an area of geographic interest that, because of the sovereignty of the Ottoman empire, needed to be portrayed in terms that were not consonant with colonial ambition. The most useful rubric to gain currency was that of a southeasterly "sphere of

²⁵ Richard Deeken, *Die Auswanderung nach den deutschen Kolonien unter Berücksichtigung der wirtschaftlichen und klimatischen Verhältnisse* (Berlin: Wilhem Süsserott, 1908).

²⁶ Karl Krüger, *Die deutschen Kolonien: Erkundlichen Umrissse und Characterbilder von unseren überseeischen Schutzgebieten* (Danzig: A. W. Kasemann, 1906).

²⁷ Heinrich Leutz, *Die Kolonien Deutschlands, Ihre Erwerbung, Bevölkerung, Bodenbeschaffenheit und Erzeugnisse* (Karlsruhe: Karl Scherer, 1900).

²⁸ L. Sander, *Die deutschen Kolonien in Wort und Bild* (Leipzig: Verlag für Allgemeines Wissen, 1906).

²⁹ Berthold Volz, *Unsere Kolonien: Land und Leute* (Leipzig: F. A. Brockhaus, 1891).

³⁰ The application of geography to the study of colonial subjects and lands is, of course, not unique to the German colonial context. A wonderful overview of this topic, covering all of the European empires, can be found in Lauren Benton, *A Search for Sovereignty: Law and Geography in European Empires, 1400–1900* (New York: Cambridge University Press, 2010).

interest” predicated on geodesy, not colonialism, a concept outlined in a c. 1914 map produced by the imperial colonial office and entitled “*Geodätisches Interessengebiet der Mittelmächte*” (Geodetic Areas of Interest to the Central Powers)³¹ [Fig. 2.3].

Geodesy, a subfield of both mathematics and the earth sciences and a tool for geography itself, is the science of the measurement and representation of the earth based on its perceived shape at any given point in history (flat, spherical, ellipsoidal). By the nineteenth century, the vast majority of scientific advancements in the field were being made in Germany. Under the tutelage of geodesy, the German colonial map goes one step further toward unifying its “area of interest” beyond its partnership with Austria-Hungary in its conflation of the Central Powers (Germany, Austria-Hungary, the Ottoman empire, and Bulgaria) into a single entity. The “geodetic” aspects of the map refer to its premise of a contiguous trigonometric slice of Eurasia and Africa and its potential apportionment of those lands through their overland, as opposed to maritime, connections. The sphere of interest includes the Nordic nations in the north, an area from the gates of Paris to northern Italy and the Mediterranean and onward past Cairo in the west, the entirety of the Arabian peninsula and the Persian Gulf in the south, and most of Persia through the Caucasus and the gates of Odessa and Saint Petersburg in the east. The longitudinal strips of land are rendered alternately in green and red. The map makes clear how the Baghdad Railway, in particular, with its geospatial pet name, “the Berlin-Baghdad Railway,” would function as the central spine of the geodetic Ratzelian organism.

Because this space was imagined through the suprainperial “scientific” geographic cartography of the *Zweibund* and represented a contiguous band of land

³¹ For a comprehensive history of geodesy in Germany, see Wolfgang Torge, *Geodäsie*, 2 vols. (Berlin: De Gruyter, 2003).

without the satellite structure necessitated by maritime divisions between colonizer and colonized, the distinction between German colonization in Africa and the country's different, ambiguous relationship with the Ottoman empire may be merely a matter of semiotics. Although the language used to describe the German settlement and penetration of the Ottoman empire occasionally included "colony" and "to colonize," more often than not the terms used were tied to earth and movement, echoing the ethos of the biological organism: "settlement" (*Besiedlung*), "development" (*Entwicklung*), "cultivation" (*Bebauung*), "irrigation" (*Bewässerung*), and so on. The actual earth of Anatolia, Rumelia, and Arabia was, as such, a site not only of German intervention but also of a discursively entrenched project of naming and description whose unique, ambiguous colonial-like qualities emerged largely from its theoretical ties to nineteenth-century geography, particularly Ratzelian geography.

2.2 Geography and the Shades of the German Colonization of the Ottoman Empire

It is significant that the most common use of the term "colony" in the German engagement with the Ottoman empire was in reference to settlements whose function was, above all, religious. Being near the Holy Land was important to both Jews and Christians of many nationalities, and in that regard, the Germany colonies at Haifa, Jaffa, Sarona, and Jerusalem are not particularly unique.³² The depiction of the German-sponsored Ottoman railways as a natural geographic enterprise, penetrating the diverse

³² For a primary source summary of who lived in these colonies and what their activities were, see "Uebersicht über den Stand der deutschen Kolonien in Palästina nach deren Angaben auf 1. August 1898," Ba R901/31731.

landscapes of the empire and uniting a particular understanding of the empire through its mere presence, can be found across a broad swath of literature, particularly the accounts of travelers. That it represented a massive shift in the railway corridors' cultural geography, however, is something that received significantly less attention. Consider this account of Eskişehir by David Fraser:

A mere village in pre-railway days, German enterprise has changed it into a flourishing town. Being selected as the principal depot of the railway, it quickly sprang into prominence, and now it is one of busiest places in Anatolia.³³

Fraser provides further details, noting that a German hotel and a German school had been established in Eskişehir and that the district around the railway station had an entirely German character.³⁴

The geographer and orientalist Hugo Grothe (1869–1954) was the most outspoken advocate of a double function for the railways that included effecting a general cultural transformation of the Ottoman empire. Grothe tried to disabuse those who believed that the railway alone could reinvigorate the Ottoman empire, for he believed that building the railway was not enough.³⁵ Grothe rejected claims that by 1906, the railway had already helped to transform the human condition of the residents of Anatolia and Arabia, noting that on his own journey along the railway he encountered a paltry sum of Germans (fewer than 200).³⁶ Grothe contended that the railway companies had hitherto failed to properly make an impact:

³³ Fraser, *The Short Cut*, 19.

³⁴ *Ibid.*, 19–20.

³⁵ See Hugo Grothe, *Die Bagdadbahn und das schwäbische Bauernelement in Transkaukasien und Palästina* (Munich: J. F. Lehman, 1902).

³⁶ Hugo Grothe, *Meine Vorderasienexpedition 1906 und 1907* (Leipzig: K. W. Hiersemann, 1913), 40. See also McMurray, *Distant Ties*, 60.

What's the point, if German scientific development of the land leads to increased German trade and railways built with German money, yet an intimate contact with the people, which can only be acquired through education and instruction, fails to materialize?³⁷

Grothe insisted that more schools and hospitals were needed and that true cultural geographic change (read "improvement") could only take place if the railway companies built these institutions in addition to building the rail.³⁸ Grothe's call was met by a host of Pan-Germanist propaganda in the German press that, McMurray has ventured, caused a great deal of stress in the German embassy in İstanbul because it required repeated assurances to the Sultan that the railways were not, in fact, part of a German colonial vision.³⁹

Grothe's contention that the dearth of German schools and institutions (and, implicitly, the attendant colonists) was stymieing a complete cultural transformation downplays what was in actuality a significant effort by German individuals as well as the German embassy in İstanbul to develop schools not only in İstanbul, but also in Bursa, İzmir, and Adana.⁴⁰ In 1906, for example, the German Consul to the Ottoman empire

³⁷ Grothe, *Meine Vorderasiensexpedition*, 40. This translation is McMurray's in *Distant Ties*, 60.

³⁸ Grothe, *Meine Vorderasiensexpedition*, 40.

³⁹ McMurray, *Distant Ties*, 61. This is also documented in consular correspondence. See Theobald von Bethmann-Hollweg to Dr. Alfred Nossig, Pera, December 30, 1909, Ba R901/31745: "Allerdings liegt die Gefahr vor, dass die Kolonisation, namentlich [sic] wenn sie längs der Bagdadbahn stattfinden sollte, von generischer Seite als ein Ausfluss pangermanistischen Geistes hingestellt wird. Solchen Verläumdungen werden wir jedoch um so erfolgreicher begegnen können, als die angesiedelten Familien die deutsche Staatsangehörigkeit weder besaßen noch erwerben können." (However, the risk exists that the colonization, especially when it takes place along the Baghdad railway, is portrayed by the general press as a discharge of Pan-German spirit. However, we would be successful if we encountered such slanders, as the resident families could neither possess nor acquire German citizenship.)

⁴⁰ It is worth mentioning that the Ottoman empire itself was not impervious to the importance of building schools abroad. The Beijing Hamidiye University, built as a center of education for China's Muslims in 1908, was seen by the Sultan as part of his caliphal duties to Muslims beyond the Ottoman borders. See İhsan Süreyya Sırma, "Sultan II: Abdülhamid ve Çin Müslümanları," *İslam Tetkikleri Enstitüsü Dergisi* (İstanbul: İÜEFY, 1979), 201–4.

offered to subsidize Carmelite schools if they would offer German,⁴¹ while in 1914, a Leipzig factory that did work for the Baghdad Railway donated office equipment and 166 pencils to German schools in the empire out of goodwill.⁴²

The efforts toward education were not limited to primary and secondary education but also included training in specific skills, including those involved in the construction, technology, and management of railways, as evinced by the Deutsche Eisenbahnschule in Karaağaç (Kargatsch) just across the Maritsa River from Edirne (and near the confluence of the borders of modern Greece, Turkey, and Bulgaria), which had been a center for German technical education when it was established in 1883 after the completion of the railways of European Turkey [Fig. 2.4]. The school's annual reports identify Karaağaç as a "new Bulgarian city," indicating the city's status as one purposively built around the new railway, probably by settlers of the newly independent Bulgaria, which may explain the town's tabula rasa square plan.⁴³ The 1915–16 report is particularly interesting: it notes that because of the war, virtually none of the school's 130 students were currently enrolled, and that the school was consequently considering offering enrollment free of charge to local Turkish children and trainees.⁴⁴ The report also recalls with excitement Ernst Mackensen's visit to the school and its impact on the morale of the German "colony" at Edirne (identified as "Odrin").⁴⁵

⁴¹ India Office to Foreign Office, March 5, 1906, NA FO 406/30.

⁴² GSPK Akt. 4507.

⁴³ See Ba R901/31747. The train station in Edirne was replaced in 1914 by a much grander station in the First National style by Kemaleddin Bey.

⁴⁴ Ibid.

⁴⁵ Ibid.

While the railways unfolded on the ground in Anatolia, Arabia, and Mesopotamia, the parlors of Berlin hosted talks by various academics, travelers, and others about cultural opportunities for Germany in the Ottoman empire. The leading venue for these talks was the Deutsche Koloniale Gesellschaft, which hosted such expert lecturers as seismologist and geologist Fritz Frech (1861–1917), a subcontractor for the railway companies who developed broad colonially-tinged lectures such as “Kulturarbeit im Bereich der Bagdadbahn” (Cultural Work in the Area of the Baghdad Railway) that touched upon all of the previously mentioned themes when he returned to Germany.⁴⁶ Private corporations such as the Deutsche-Levantinische Baumwollgesellschaft (German-Levantine Cotton Association) that did a great deal of work with the railway and had established key networks in the region were invariably referred to as entities that could enact and maintain semicolonial control over the regions under their imprimatur.⁴⁷

Railway construction also facilitated observation of the surreptitious colonization of Anatolia by other national groups. Otto Warburg (1859–1938), professor, botanist, Zionist, and industrial agriculture expert, stumbled upon a series of lackluster colonies immediately adjacent to the railway around 1900 while traveling between Eskişehir and Ankara. Shocked by their ragged appearance, Warburg investigated them and discovered that they were inhabited by Romanian Jews who had been resettled after losing their land in the Treaty of Berlin. Warburg took the community of more than 100 families under his wing, championing their interests to both local Ottoman and international Zionist

⁴⁶ GSPK Akt. 4507. Frech published a related essay in 1913: “Die Bagdadbahn und ihre Kulturbedeutung,” *Die Naturwissenschaften* 1, no. 2 (1913): 56–62.

⁴⁷ Emil Heubusch and Werner Wüs, “Deutsche Interessen im Vilajet Adana,” Mersin, May 3, 1909. Ba R901/6667.

interests and improving their living quality through subsidies.

2.3 Geography, Railway, and the Descriptive Tract

Descriptive and documentary tracts of the orient are a well known genre and are generally associated under either one of two rubrics: the encyclopedic collection of knowledge of a land newly brought under European dominion or more specific treatises on the arts of a foreign (geographically and/or historically) culture toward the end of the renewal of contemporary knowledge. These rubrics for the dissemination of geography through publishing in the imperial era are, not surprisingly, focused on French and British examples, with Napoleon Bonaparte's (r. 1804-14, 1815) thirty-seven volume *Description de l'Égypte* (1809-1829)⁴⁸ [Figs. 2.5-2.7] and Owen Jones' (1809-1874)⁴⁹ *The Grammar of Ornament* (1856) [Figs. 2.8-2.10] being the archetypal examples of encyclopedic and stylistic modes respectively. There was no prominent equivalent in German language publishing, although the Austro-Hungarian *Kronprinzenwerk*,

⁴⁸ The full collection of volumes is digitized and available online. See <http://descegy.bibalex.org/index1.html>, accessed February 22, 2014. Secondary literature includes Albert Boime, *A Social History of Modern Art, Volume 2: Art in an Age of Bonapartism, 1800-1815* (Chicago: University of Chicago Press, 1993); Yves Laissus, *L'Égypte, une Aventure Savante* (Paris: Fayard, 1998); Yves Laissus, *Jomard, le dernier Égyptien* (Paris: Fayard, 2004).

⁴⁹ There is an excellent breadth of secondary literature on *The Grammar of Ornament*. See Mark Crinson, *Empire Building: Orientalism and Victorian Architecture* (London: Routledge, 1996); Kathryn Ferry, "Printing the Alhambra," *Architectural History* 46 (2003): 175-88; Carol A. Hrvol Flores, "Owen Jones: Design, Ornament, Architecture & Theory in an Age of Transition (New York: Rizzoli, 2006); John Kresten Jespersen, "Originality and Jones's *The Grammar of Ornament* of 1856," *Journal of Design History* 21, no. 2 (2008): 143-53; Stacey Sloboda, "The Grammar of Ornament: Cosmopolitanism and Reform in British Design," *Journal of Design History* 21, no. 3 (2008): 223-36.

examined further here, did establish important paradigms of charting those contiguous imperial lands.

That did not mean, however, that there was not an appetite for geographic knowledge from books and the railway was an opportune moment to coalesce a body of geographic literature, albeit with different characteristics than the French or British examples by virtue of its technically non-colonial status. For armchair travelers who did not travel to or circulate within the Ottoman empire's railway network as colonists—this included the vast majority of policy makers in Berlin and Holzmann and Deutsche Bank executives in Frankfurt—there was no shortage of tracts documenting its landscapes and its natural as well as cultural geography. In the postmodern sense, these descriptive tracts constructed the “otherness”—even when written by Ottomans themselves—of the people and places that constituted the landscape of the Ottoman railway network. It would not be apt to consider these documents as vehicles of knowledge, even though many purported to be. However, it would also be negligent to dismiss them entirely, as they contain critical subjective accounts whose effects on the broader understanding and interpretation of the railways and their landscapes across Europe and the Ottoman empire are undeniable. In what follows, key accounts in the most widely read languages—Turkish, German, French, and English—will be considered and analyzed for their subjective and epistemic aspects.

Specialists on travel literature have often cited the leitmotif of epistemic violence that colors the power-laden relationship of the traveler to his (and rarely her) subject.⁵⁰

⁵⁰ See examples of this concept in Hamid Naficy, *A Social History of Iranian Cinema*, vol. 1, *The Artisanal Era, 1897–1941* (Durham, NC: Duke University Press, 2011), 75; Mary Roberts, *Intimate Outsiders: The Harem in Ottoman and Orientalist Art and Travel Literature* (Durham, NC: Duke University Press, 2007).

What is meant is that travelers, in the privileged position of being individuals who have the financial means to travel, the education to write, and the desire to disseminate their accounts after they have been written, can inflict a certain violence on their subjects that strips them of their capacity to speak and represent themselves as it freezes them in the gaze of those who do not know them and who rarely speak their language. Although the trope of epistemic violence applies primarily to the relationship between people, it is also possible to see it occasionally in the geographic descriptions of landscapes, which are often depicted in terms of extremes: as utterly uncanny, breathtakingly beautiful, or, alternately and quite commonly, utterly hideous. As a conduit traversing everything from the barren steppe, craggy mountains, and lonely desert to lively villages and bustling cities, the railway offered a particularly broad venue for (and occasionally against) the perpetuation of epistemic violence. These accounts rarely described the railway bed, the rolling stock, or even the station buildings, with the important exception of the Turkish accounts. It would appear that the apparatus of the actual railway was meant to be largely invisible and not a part of the gaze offered by the geographic image to be conjured.

Among English language materials, David Fraser's 1909 *Shortcut to India* is unrivalled.⁵¹ In describing the Gulf of İzmit, for example, Fraser's evocative imagery is couched in the nineteenth-century literary picturesque tradition:

Sometimes the train runs along the top of a cliff which affords an extensive view of the lovely islands dotting the blue water, and again it descends to the very edge of the clear tideless sea whose tiny waves lap the embankment within a few feet of the grinding wheels. Little bays curve the coast-line [sic], in each a miniature Naples, with its white houses and green background reflected in the placid mirrorlike water. Small fishing-

⁵¹ Additional references appear in the bibliography at the end of this study; they are too numerous to note here. It is also important to note that travel accounts in English were more commonly published as separate volumes, whereas in German, the genre was commonly published in regularly dispatched newspaper installments.

villages appear every now and then, each with its little fleet of boats suspended in the transparent depths. The small stone piers are picturesque affairs, busy in a somnolent sort of fashion, occasionally given up to red-fezzed and baggily-trousered urchins who play with the shrill abandonment of irresponsible childhood.⁵²

In traveling through Biledjik, Fraser redacts the landscape comparisons to Europe and begins to describe the Anatolian landscape in singular, descriptive prose:

After one wide curve the little town of Biledjik seemed to lie at our feet, the people to be no bigger than flies, the foaming river a mere thread of silver. Up and up climbed the train, through a dozen tunnels, over innumerable bridges, along magnificent gorges, until darkness came and I could see no more. For varied scenery, exquisite on the shores of Marmora [sic], dark and forbidding in the gorges that give approach to Guiveh [sic], grand and impressive on the mountain side above Biledjik [sic], there are few railways in the world that can equal the first day's journey on the Anatolian line.⁵³

Fraser directly addresses the theme of the geographic picturesque in Baghdad:

The narrow streets, the quaint houses, the iron-bound doors giving glimpses of shady courtyards and splashing fountains, are redolent of the East and all that it means to those unsatisfied souls who adore the picturesque and ache continually for touches of imagery in a world of materialities.⁵⁴

Nor does Fraser neglect the opportunity to comment upon the important contemporary matter of irrigation and the transformative geographic labor patterns it would necessitate in and around ancient Babylon:

Having already dilated upon the potential wealth of Babylonia in the chapter on Baghdad, it is unnecessary to do more than reiterate the option that if politics permitted, and population existed, and money were forthcoming, the country around Baghdad might easily be transformed into a modern Garden of Eden. As there is no prospect of a conjunction of these three conditions, or of the appearance of any one of them in present times, it is not much use discussing the Baghdad Railway in relation to a re-created Chaldea.⁵⁵

⁵² Fraser, *Shortcut to India*, 18. Fraser also makes mention of the “Teskeré” system, requiring passengers to carry documentation that is checked at all stations, one he suspects is prohibitively expensive for most Turks, reducing its populist appeal and reinforcing an image of the railway as a project of the Sultan and the government alone (14).

⁵³ *Ibid.*, 19.

⁵⁴ *Ibid.*, 234.

⁵⁵ *Ibid.*, 293.

Rich country, highly irrigated, requires a very dense population. The land is here, the water is waiting, and it might be, under Allah, that the money and the political situation which would make the scheme feasible would be forthcoming. But where are the two or three million of inhabitants to come from?⁵⁶

There is, too, as regards the route of the Baghdad Railway, the question of the disposition of the inhabitants. They are nearly all Arabs, to whom manual labour is as repulsive as it is to the unemployed of Trafalgar Square.⁵⁷

Fraser's work is also festooned with imagery. He captures the tracks stalled outside of Bulgurlu as projecting off of their railbed in "dumb amazement"⁵⁸ [Fig. 2.11]. He alludes to the difficulty of boring through the Taurus Mountains with a simple sectional diagram⁵⁹ [Fig. 2.12], which is juxtaposed with images of simple everyday life such as a coffee shop in Baghdad [Fig. 2.13].

Leading among the descriptive geographic tracts produced in French are René Henry's 1908 *Des Mont de Bohême au Golfe Persique*,⁶⁰ Louis Cumin's 1913 *La Question du Chemin de Fer de Bagdad*,⁶¹ Abel Muratet's 1914 *Le Chemin de Fer de Bagdad*,⁶² and Georges Mazel's 1911 *Le Chemin de Fer de Bagdad: Étude Économique et Internationale*.⁶³ Like the British literature, the French literature is tinged with a certain amount of suspicion and apprehension that is tied to the larger geopolitical situation and

⁵⁶ Ibid., 242.

⁵⁷ Ibid., 300.

⁵⁸ Ibid., 50.

⁵⁹ Ibid., 56.

⁶⁰ René Henry, *Des Mont de Bohême au Golfe Persique* (Paris: Plan-Nourrt et cie, 1908).

⁶¹ Louis Cumin, *La Question du Chemin de Fer de Bagdad* (Brignais: Imprimerie de l'École professionnelle de Sacuny, 1913).

⁶² Abel Muratet, *Le Chemin de Fer de Bagdad* (Agen: Imprimerie Moderne, 1914).

⁶³ Geogres Mazel, *Le Chemin de Fer de Bagdad: Étude Écononmique et International* (Montpellier: Firmin et Montane, 1911).

the sense of competition for influence in the Near East. Cumin's text is the most comprehensive and frames the Ottoman railways as the brainchild of von Pressel, giving credit where credit is due. Cumin's most important suggestion, however, is that von Pressel did not actually understand the real value of his railway proposal connecting the Mediterranean with the Persian Gulf. As Cumin saw it, the true genius was connecting the Mediterranean and the Persian Gulf, by rail, to the imperial capital:

We do not dwell on this first draft by Pressel which was not adopted. The truly original design by Pressel, was to connect the [Persian] Gulf and the Mediterranean, not with one another, but with Constantinople. The thought of the fair capital heading all the railways of Turkey in Asia (or even Turkey in Europe) seduced the Porte, for the reasons previously indicated.⁶⁴

A key earlier German tract is the German lieutenant and geographer Karl Kannenberg's (fl. 1890–1905) 1897 study, *Kleinasiens Naturschätze* (Asia Minor's Natural Treasures).⁶⁵ Kannenberg's text broke with the tradition of German literature on Asia Minor as a field of purely scientific research and wrote of its geography in more profane terms: utility, commerce, and further potential for development. A review of the publication in the *Journal of the American Geographic Society of New York* duly noted that the text bore an obvious "military stamp."⁶⁶ A long sentence explaining an analogue

⁶⁴ Cumin, *La Question*, 82-83. "Nous n'insisterons pas sur ce premier projet de Pressel qui ne fut pas adopté. La conception vraiment originale de Pressel, consistait à relier le golfe et la Méditerranée, non pas entre eux, mais avec Constantinople. La pensée de faire de la capitale la tête de ligne de tous les chemins de fer de la Turquie d'Asie (voire même de la Turquie d'Europe) séduisit la Porte, pour les motifs que nous avons précédemment indiqués."

⁶⁵ Karl Kannenberg, *Kleinasiens Naturschätze: Seine wichtigsten Tiere, Kulturpflanzen und Mineralschätze vom wirtschaftlichen und kulturgeschichtlichen Standpunkt* (Berlin: Gebrüder Borntraeger, 1897). A certain Schaeffer, another German lieutenant, contributed to the study. See also Evans Lewin, *The German Road to the East: An Account of the 'Drang nach Osten' and of Teutonic Aims in the Near and Middle East* (New York: Doran, 1917), 64.

⁶⁶ W. D. McC. [full surname unknown], "Naturschätze von Karl Kannenberg by Gebrüder Borntraeger; Karl Kannenberg," *Journal of the American Geographical Society of New York* 29, no. 4 (1897): 462.

concept opens Kannenberg's tome on the natural wonders of Asia Minor: "The Turks are the Germans of the East as the Greeks are the French."⁶⁷ Although his tract is purely descriptive and ostensibly unrelated to the German-Turkish railway collaboration, Kannenberg's predication of a historical, almost spiritual, kinship between Germany and the Ottoman empire alerts the reader that this is in fact a geographic treatise on the contiguity, both literal and figurative, of the German and Ottoman empires. He explains:

This shows itself not only through the fact that the Germans, in spite of the difference in religion, feel themselves drawn much more to the Turks than to the Greeks, while the French sympathize more with the latter, but this has shown itself especially during the late Greek and Turkish war, which reveals so many points of resemblance with the German and French war; on the one side the theatrical fighter's pose, the many bombastic words before the beginning, and during the fight at the start of a bold *élan*, which, however, was soon broken by the first resistance—on the other side over against the attacks of the mobile and excited enemy, at the start utter calm and quiet, then—the awakening of a lion—a stroke like that of the German *Michel*, when he becomes angry.⁶⁸

Kannenberg articulates his perception of the affinity between the two lands by analogizing Asia Minor's landscapes, its flora and fauna, with those of Germany, noting how certain animals and minerals are improperly utilized whereas in Germany they are, by his account, properly exploited. Kannenberg speaks of the railways' particular potential for opening up Mesopotamia and remaking Anatolia into the breadbasket it had been in Roman times.

Geography and politics in the German literature were more clearly linked in the latter years of railway construction, when texts proliferated with far greater frequency. Braunschweig geographer Ewald Banse's (1883–1953) florid 1913 account of the railway, *Auf den Spuren der Bagdadbahn*,⁶⁹ and Latvian-born eugenicist, colonial

⁶⁷ Kannenberg, *Kleinasien Naturschätze*, ix.

⁶⁸ Ibid. This is McC.'s translation. See McC., "Naturschätze," 460–1.

⁶⁹ Ewald Banse, *Auf den Spuren der Bagdadbahn* (Weimar: A. Duncker, 1913).

advocate, and political commentator Paul Rohrbach's (1869–1956) second edition (1911) of *Die Bagdadbahn*,⁷⁰ with its profoundly deep racism, are excellent examples of the range of descriptive geographic tracts about the railways published in Germany. The most dramatic account of the railway environs in German, however, is that of the Austrian journalist Karl Figdor (1881–1957), who traveled the railway on duty for the *Vossische Zeitung* in the spring and summer of 1914 at the height of the Baghdad Railway's activity and while the European continent was fracturing into war. Figdor's writing for the *Vossische Zeitung* as well as for the *Berliner Tageblatt* had begun as travel and geographic descriptions, but the sensationalist elements that would characterize his later career as an author of adventure novels are already present in his report from what would become the Turkish front. Figdor alternates between an expository tone, describing the Baghdad Railway's landscape - the mighty bridge over the Euphrates, the channeling of hard rock in imposing mountain ranges, and German settlements along the way - and political commentary. Unlike many other travelers, he also makes particular note of the stations that are already built or under construction, along with their architectural aspects:

The [stations'] smallest details are finished in situ. There was nothing [raw materials] there, neither wood nor stone nor anything else. As such, the building material chosen is cement stone [*Zemenstein*], which is equipped with slots for air circulation. The roof is constructed of asbestos sheets. In particularly dangerous stations, slots [for guns] with stirrups for bullets are furnished to protect against [attack]. There are no more workers' houses beyond the Euphrates, everything is concentrated in the stations.⁷¹

⁷⁰ Paul Rohrbach, *Die Bagdadbahn* (Berlin: Wiegandt, 1911).

⁷¹ Karl Figdor, "Die Brücke über den Euphrat," *Vossische Zeitung* 263 (May 20, 1914): "Sie sind die in die kleinste Einzelheit fertig an Ort und Stelle angekommen. Es war dort nichts vorhanden, weder Holz noch Stein oder anderes. Man hat als Baumaterial daher Zementstein gewählt, der mit Hollerschlitzen zur Luftzirkulation versehen ist. Das Dach wird aus mit [sic] Asbest... Leinwand konstruiert. Bei besonders gefährdeten Stationen werden die Hollerschlitze zum Schutz gegen Kugel mit großem Rie[illegible] ausgefällt. Streckenarbeiterhäuser gibt es jenseits des Euphrat

The architectural changes Figdor noted in the buildings in the predominantly Kurdish parts of the empire are an example of aspects of the built environment that allowed him to pivot from expository prose to a more energetic and celluloid account of the railway and its affairs, in this case the interethnic strife along the railway:

Regarding the riots on the Baghdad railway, there are now further messages [that reveal] that the disquiet has taken a more serious turn than was initially assumed. The Kurds attacked a shack of the [Railway] Company and assaulted the German engineers, of which eight were wounded. Among the wounded were also an Austrian and an Englishman... The [British] consul also reported that two Englishmen who initiated archaeological excavation work [in the area] for the British Museum have made the greatest effort to prevent their own Kurds from joining the cause of the mutineers.⁷²

European geographic tracts on the Ottoman empire centered on the railways from around 1890 onward and liberally interlaced “scientific” geographic information with expository descriptions of land forms, flora and fauna, buildings and built environments, and political events. The geographic and descriptive travel literature produced internally in the Ottoman empire, however, had a considerably different context and present and an additional set of historiographic issues.

nicht mehr, alles ist in den Stationen konzentriert.” Figdor is likely describing Akçakale station here.

⁷² Karl Figdor, “Kurdische Räuber an der Bagdadbahn,” *Vossische Zeitung* 154 (March 25, 1914): “Ueber die Tumulte auf der Bagdadbahnstrecke sind jetzt weitere Meldungen eingelaufen, nach denen die Unruhen einen ernsteren Verlauf genommen haben, als man anfangs annahm. Die Kurden griffen einen Schuppen der Gesellschaft an und überfielen die deutschen Ingenieure, von denen 8 verwundet wurden. Unter den Verwundeten befinden sich außerdem noch ein Oesterreicher und ein Engländer... Der Konsul berichtet ferner, daß zwei Engländer, die die Ausgrabungsarbeiten für das britische Museum leiteten, die größten Anstrengungen machten, um ihren eigenen Kurden zu verhindern, gemeinsame Sache mit den Meuterern zu machen.”

2.4 Dispatches from the Ottoman “Outback”: *Servet-i Fünun*’s Geographic

Representation of the Ottoman Railways

Christoph Herzog and Raoul Motika have identified several epistemological problematics in the genre of late Ottoman travel literature that bear mentioning in the context of the texts written by Ottoman elites, typically İstanbulites, that describe travels along the railways.⁷³ Herzog and Motika note that despite the longstanding tradition of travelogues in Ottoman literature, clear distinctions were made between pre- and early modern *rihla* literature and the European format of travel literature acculturated in the latter half of the nineteenth century.⁷⁴ This raises the specter of larger issues of Ottoman orientalism and the postmodern issues of internal and/or reflexive “othering.”⁷⁵ Herzog and Motika have characterized this literary landscape as an Ottoman “outback” where an untamed and less civilized, albeit still national, landscape was described, one that has

⁷³ See the article “Seyahatnâme,” in *Türk Dili ve Edebiyatı Ansiklopedisi, Devirler, İsimler, Eserler, Terimler*, vol. 7 (İstanbul: Dergah, 1990), 550. An excellent example is explored in Hala Fattah, “Representation of Self and the Other in Two Iraqi Travelogues of the Ottoman Period,” *International Journal of Middle Eastern Studies* 30 (1998), 51–76.

⁷⁴ Christoph Herzog and Raoul Motika, “Orientalism *Alla Turca*: Late 19th / Early 20th Century Ottoman Voyages into the Muslim ‘Outback’,” in “Ottoman Travels and Travel Accounts from an Earlier Age of Globalization,” special issue, *Welt des Islams* 40, no. 2 (July 2000), 140–1. The distinction was staunchly supported by Mithat Pasha, the sultan’s close ally, publicist, and *homme de lettres*. Regarding the overall shift in Ottoman literature, see Ahmet Hamdi Tanpınar, *XIX Asır Türk Edebiyatı Tarihi* (İstanbul: İbrahim Horoz Basımevi, 1956) and Kenan Akyüz, “La Littérature Moderne de Turquie,” in *Philologie Turciae Fundamenta*, vol. 2, eds. Louis Bazi, Alessio Bombaci, and Jean Deny (Wiesbaden: Franz Steiner, 1965), 465–634. Regarding Mithat in particular, see Cevdet Kudret, *Ahmet Mithat* (Ankara: Ankara Üniversitesi Basımevi, 1962); Münir Çapanoğlu, *İdeal Gazeteci Efendi Babamız Ahmed Midhat Efendi* (İstanbul: Ticaret Postası Matbaası, 1964); Orhan Okay, *Batı Medeniyeti Karısında Ahmed Midhat Efendi* (Ankara: Baylan Matbaası, 1975).

⁷⁵ Ussama Makdisi analyzes this phenomenon across cultural as well as political contexts. See Ussama Makdisi, “Ottoman Orientalism,” *The American Historical Review* 107, no. 3 (June, 2002): 768–96. See also Edhem Eldem, *Un Ottoman en Orient: Osman Hamdu Bey en Irak, 1869-1871* (Arles: Actes sud; Paris: Sindbad, 2010).

parallels in the literary traditions of “frontier” nations like Canada, the United States, New Zealand, and Australia.⁷⁶ By and large, the most significant thing to extract from the corpus of descriptive Ottoman geographic and literary tracts on the railways is what they reveal about issues of class, education, mobility, and other matters of internal organization. Herzog and Motika have duly pointed out that Ottoman travel literature within the empire’s “orbit” is difficult to characterize axiomatically, given the variety of its authors and the locations visited, but some common themes centered on the new railway network do emerge in the literature and literary excerpts, and foremost among these are the monolithic concepts of “progress” and “modernity” through the new-fangled technological expertise.

Ahmet Mithat sets the tone in his 1878–79 tract, which describes a gradual shift in the Ottoman psyche in which travel is transformed from a burdensome activity to one that could—if not should—be considered pleasurable *because* of modernity. He notes:

In these days of ships so grand as to subjugate the seas through their own force and railways capable of mocking at terrestrial distances, it can be said that there is left hardly any difference between travelling across the world’s largest continent and strolling through a city.⁷⁷

⁷⁶ “Outback” genre literature was particularly common in Canada, Australia, and the United States. Examples are Alfred Searcy, *By Flood and Field* (London: G. Bell & Sons, 1912); H. H. Barnes, *Journal of a Trip to Manitoba and Back, June and July, 1878* (Halifax: Doley, 1878). For an analysis see Judith A. Jensen, “Unpacking the Travel Writers’ Baggage: Imperial Rhetoric in Travel Literature of Australia 1813–1914” (PhD diss., James Cook University, 2010).

⁷⁷ As cited by Herzog and Motika, “Orientalism *Alla Turca*,” 147. According to the authors, Ahmet Mithat published “a preface to a travelogue entitled *İstanbul’dan Asya-yı Vusta’ya Seyahat* by a certain Mehmed Emin, which first was serialized in Midhat Efendi’s *Tercüman-ı Hakikat* and afterwards printed as a book in his *Kırk Anbar Matbaası* in the winter of 1878/79” (141). They note that it was serialized “in *Tercüman-ı Hakikat* in 23 episodes between issues no. 138 (15 Zilhicce 1295) and 163 (14 Muharrem 1296). Ahmed Midhat’s preface appeared in nos. 138 and 139. The year 1295 given in the book must be according to the Maliye calendar. Midhat resumed the contemplation about this subject on several later occasions, e.g. in the introductions to his *Rikalda Yahud Amerika’da Vahşet Alemleri* (Istanbul: Tercüman-ı Hakikat Matbaası, 1307 [1890]) and his *Avrupa’da Bir Cevelan* (Istanbul: Tercüman-ı Hakikat Matbaası, 1307 [1890]). According to Clément Huart (*Bibliographie Ottomane. Notice des livres turcs, arabes et persans*

Late Ottoman travel literature in lands with railways was often accompanied by maps of the railway network and associated shipping networks alongside maps of geological structures with latitudinal and longitudinal bearings.⁷⁸

Servet-i Fünun is without a doubt the single most important source for this literature; its regular reportage on the railways explains how the railways and their landscapes, most of which were far away from the imperial capital, were pitched to an elite readership. Although the journal covered a wide range of topics from foreign affairs to the sinking of the Titanic, from exposés on rabid street dogs to ladies' fashions from Paris, Ahmet İhsan Tokgöz used the publication to promote and explore a number of geographic themes, particularly as they related to cultural geography, and to a large extent the dispatches on the railways fell into that vein, in both the towns and the visuals accompanying the pieces [Fig. 2.14]. From the journal's inception in 1892 through 1919, there is a prominent interest in European affairs and culture, but no other nation is as thoroughly covered as Germany. Its politics, architecture, exhibitions, fashions, technological advances, and literature, among other things, are followed with consistent interest. In some instances German trends, such as *Turnen*, the nationally-tinged form of youth gymnastics, are even appropriated for the Ottoman readership through staged instructive photos [Fig. 2.15].⁷⁹ In the realm of technology, in particular, the journal

imprimés à Constantinople durant la période 1302-1302 de l'hégire (1885-1886). Extrait du Journal Asiatique [Paris, 1887], 45) a 'Pseudo-réimpression' was published in 1303. The simplified translation into modern Turkish by Rızâ Akdemir, *İstanbul'dan Orta Asya'ya Seyhaat* (Ankara, 1986), is unreliable."

⁷⁸ Herzog and Motika, "Orientalism *Alla Turca*," 173.

⁷⁹ *Turnen* is an athletic repertoire that is not easily translated into English; "artistic gymnastics" is the most approximate phrase. The so-called "movement" of *Turnen* in German culture has its

privileged German accomplishments, devoting large portions of volumes to topics like bridges designed by German engineers, such as the iconic sinusoidal steel suspension over the Elbe River in Hamburg [Fig. 2.16].

The most significant account of the new railways was the five-part series of articles collectively entitled “Osmanlı Demiryol Hattında Haydarpaşa’dan Konya’ya bir Cevelan: Azimet ve Avdet 1498 Kilometre,” which was published by *Servet-i Fünun* beginning in October 1896 on the occasion of the completion of the railway to its Konya terminus earlier that year.⁸⁰ One issue proudly displays the new station building on its cover [Fig. 2.17], and many of the issues take the opportunity to concentrate on the greater cultural riches around Konya, such as the ruins of Kaykubad’s palace [Fig. 2.18] as well as those in the vicinities of Akşehir and Afyonkarahisar. Traveling from Konya province towards İstanbul, the writers’ account focuses mostly on sites along the railway, not the railway stations or elements per se.⁸¹ The accounts nonetheless recount the thrill of the railway’s technological leaps, its landscape and the parts of the Ottoman “outback” it opened up:

Less than three or five years ago, the journey to Konya was considered as important as it was difficult. For one to say “I travelled to Konya” meant that “I made one of the

roots in the ideas of Friedrich Ludwig Jahn (1778–1852), who co-authored a manifesto for the movement with Ernst Wilhelm Bernhard Eiselen (1793–1846): Friedrich L. Jahn and Ernst W.B. Eiselen, *Die deutsche Turnkunst zur Einrichtung der Turnplätze* (Berlin, 1816). Concerning the manifesto’s lasting impact, see Carl Philipp Euler, *Geschichte des Turnunterrichts*, vol. 2 (Gotha: E. F. Thienemann, 1891).

⁸⁰ “Osmanlı Demiryol Hattında Haydarpaşa’dan Konya’ya bir Cevelan: Azimet ve Avdet 1498 Kilometre,” *Servet-i Fünun* 292–96 (1312/1896).

⁸¹ The account of the journey more or less terminates at Eskişehir because the journal had also published accounts of the stretch from Haydarpaşa to Eskişehir in Volumes 77 and 78 and from Eskişehir to Ankara in Volumes 122, 123, 124 and 125. This particular journey is chosen as a case study because it was not only the last installment of the Anatolian Railways but also because it was the longest report, spanning five consecutive issues.

important journeys.” However, now we will travel for two days in moving rooms [train cars]. Under agreeable circumstances we will arrive to the well-known city where in old times one could have hardly arrived in less than fifteen days. As the developments in the civilization become known, are read in newspapers and become known for the influence that it has created, it is also something quite different to benefit from the influence it makes one feel. One is verbal and theoretical. The other one is practical. We hear that in America, one can travel [by rail] up one side and down the other in three days. We read [these] travel books... Above all, when a person sees the beautiful works of these modern institutions within his motherland, his home country, through his own eyes, only then has he this entirely different feeling.⁸²

In Konya itself, the *Servet-i Fünun* writers note the ripple effects the railway development had already had on the city landscape: “nice and smoth roads,” “a mosque with very elegant minarets,” and generally bigger buildings.⁸³ Naturally the writers take in the main sites of the city, including the mausoleum of Jalal ad-Din Muhammad Rumi:

⁸² “Daha üç beş sene önce Konya’ya kadar yolculuk pek önemli ve zor olarak değerlendirilirdi. Konya’ya gittim geldim demek, büyük seyahatlerden birini yaptım demekti. Gel gör ki biz hareketli odalar içinde iki gün gideceğiz. Mükemmel bir rahatlık içinde –eskilerin on beş günde güç bela ulaştıkları – meşhur şehre ulaşacağız. Medeniyetteki gelişmeler duyuldukça, gazetelerde okundukça meydana getirdiği etkiden özellikle şahsen faydalandıkça hissedilen etkisi de pek farklıdır. Birisi sözlerdir, teoriktir. Diğerisi ise uygulamadır. Amerika’yı bir baştan bir başa üç günde trenle geçiyorlar, diye duyarız. Gezgincilerin gezi yazılarını okuruz...Hele oradaki gelişmiş kurumlara benzer güzel eserleri insan memleketi, vatanı içinde kendi gözleri ile görürse, o zaman büsbütün başka duygulara kapılır.” Anonymous, “Osmanlı Demiryol Hattında Haydar Paşa’dan Konya’ya Bir Gezinti ‘Gidiş ve Dönüş: 1498 Kilometre’,” *Servet-i Fünun* 292 (25 Ekim 1312).

بول قطع ايليہ جکز. دھاوچ يش سنہ اقدم قونيه يہ قدر يو لجيلق پک مهم وکوج تلقی اولنور ایدی، قونيه يہ کیتدم کلدیم دیمک بیوک سیاحتلر دن برینی یابدم دیمک ایدی؛ حالبوکه بز متحرک اوطه لر ایچنده ابکی کون تکرلنه جکز، کمال استراحتله اوللری اونیش کونده کوچ بلا مواصلت ایدیلن شهر شهیره داخل اوله جغز؛ ترقیات مدنیه نک ایشیدلدکجه، غزنهلرده اوندقجه حاصل ایندیکی تأثر له بالفعل استفاده اولندقجه حس ایدیلن تأثیری پک فرقلیدر. بریسی قولیدر، نظر بدر؛ دیگرى عملیدر، فعلیدر. آمر یقایی برباشدن برباشه اوچ کونده شمندوفرله قطع ایلورلر دیه ایشیدیرز، سیاحلرک سیاحتنامه لر بنی اوقورز، بوبابده کی حسیاتمز اوسیاحتی بالفعل اجرا ایدرکن کلیاً بشقه درلو تجلی ایلر. هله اوراده کی مؤسسات مدنیه يہ معادل بر اثر همتی انسان مملکتی، وطنی داخلنده مشاهده ايله قریرالعين اولورسه اوقت بسیتون بشقه تحسسات ايله متحسس اولور.

⁸³ “...kerpiç duvarlı topraktan fakat geniş evler arasında, geniş bir caddede gitmeye başladık. Minareleri gayet zarif bir cami-i şerif önünden geçtik. Binalar büyüdü. İki defa sağa ve sola döndük. Sıra ile kapalı dükkanlarından çarşı olduğu anlaşılan bir yolu da geçtikten sonra bir meydana çıktık, arabamız durdu, otele gelmiştik.” Anonymous, “Osmanlı Demiryol Hattında Haydar Paşa’dan Konya’ya Bir Gezinti ‘Gidiş ve Dönüş: 1498 Kilometre’” / (Eventually after three or five minutes our landau [carriage] arrived to a nice and smooth road. We started to ride on a avenue, between earthen but spacious houses with mud walls. We passed by a mosque with very elegant minarets. The buildings got bigger. We turned to right and left. We arrived to a square passing by a road that is apparently a bazaar, a row of freestanding stores arranged in a row.) *Servet-i Fünun* 292 (25 Ekim 1312).

We were excited to be standing in front of the great master of Mesnevi which has been an important place in our way of thinking and writing. Through the door we entered into a court - which is decorated with a beautiful şadırvan [fountain] in the middle of it. The entrance of the great tomb can be found straight ahead. The decorations of ornate marbles around this entrance are outstanding and beautiful examples of lapidary. One of the Mevlevi dervishes passed by us. He opened the door of the tomb with much ceremony. We too entered in reverently. The dimness, pierced by the glimmer through the window, increases the spirituality of this sacred place. Here our previous excitement turned into a conscientious, pure happiness.⁸⁴

For the writers, the spiritual importance of Konya as a center of Sufi life remained despite the railway and despite the infrastructural and technological advancements occurring in the city's outskirts; the inner city, its bazaars and everyday life maintained their rustic Anatolian quality and their spiritual relevance. Meanwhile, not far from the station, the writers make mention of a "model farm" which appears to have been a location specially made in conjunction with the railway, likely to demonstrate and perhaps instruct locals in advanced agricultural techniques:

To arrive at the [model] farm we cross the bazaar of the city up one side and down the other. The goods in the stores were few and their appearance was poorish. It was

واقعا اوچ يش دقیقه صوکره عربيه مز کوزل برشوسه بي بولدی؛ کریچ دیوارلی طپراقدن، فقط واسع خانه لر آرهنده، کنیش برجاده ده کیتیمکه باشلادق. مناره لری غایت ظریف بر جامعشمریف اوکندن کچدک؛ پنالر بیودی؛ ایکی دفعه صاغه وصوله قیورلدق؛ صره ابله قپالی دکانلرندن چارسو اولدبغی اکلاشیلن بر یولی ده قطع ایلدکن صوکره برمیدانه چیققدق؛ عرنهمز طوردی، اولنه کلمشیدک.

⁸⁴ "Fikir ve kalemimizde önemli bir yer tutan Mesnevi sahibinin yüce ruhlarının karşısında bulunmak bizim içimizi heyecanla doldurmuştu. Kapıdan ortası güzel bir şadırvan ile süslü-avluya girdik. Yüce türbenin girişi tam karşıya bakıyordu. Bu girişin etrafındaki mermerleri süsleyen renkli renkli nakışlar oyma sanatının çok üstün ve güzel örnekleridir. Mevlevi dedelerinden bir kişi bizim önümüze geçti. Bir tören havasında türbenin kapısını açtı. Biz de son derece saygılı bir şekilde içeriye girdik. Süslü pencerelerden süzülen hafif bir ışığın meydana getirdiği loşluk da bu mübarek yerin ruhaniliğini artırıyor. Burada biraz önceki heyecanımız salt vicdanî, saf bir mutluluğa dönüştü." Anonymous, "Osmanlı Demiryol Hattında Haydar Paşa'dan Konya'ya Bir Gezinti 'Gidiş ve Dönüş: 1498 Kilometre'," *Servet-i Fünun* 293 (22 Ekim 1312).

برتاثره دوچار اولدق: صاحب علوی مناقب مثنویک فکر وقلبمزده برطونان موقع قدسی روحانیسی روحمزى هیچانه کثیر مشیددی. قپودن اورته سی کوزل بر شادروان ابله مزین حولی به داخل اولدق؛ تربه شریفه نک مدخلی نام قارشى به مصادفدر. بومدخلك اطرافده کی مرمرلری نزیین ایدن نقوش کوناکون صنعت حکک برر نمونه فوق العاده لطافتیدر. ددکاندن برذات بزه تقدم ایتدی، کمال اختفال ابله تربدنک قیوسنی آجدی؛ بزده کمال احترام ابله داخل اولدق. مزین بنجره لردن سوزولن خفیف برضیا حصوله کتیردیکی لوشلق ابله بو موقع مبارکک روحانیت اصلیه سنی تزئید ایدیورودی. بوراده بر آن اولکی تهیجمز صرف وجدانی بر مسرت مسافیه یه تحول ایتدی!

understood that the market was not much of [a place of] trade. [All one could find] here are essential goods like meat and oil, all very cheap. Thanks to the railway line established by the efforts of our Sovereign, local products can be delivered to the trade centers because of this cheapness and thus they are received with pleasure. The benefits of the farmers who grow them cannot be sacrificed for the few advantages of those who consume agricultural products and oil in the city... The model farm consists of three separate buildings around the station, whose pictures you can see in this week's issue. Thanks to the efforts and care of those who were appointed to reclaim and expand it, we hope that it will become an exemplary model farm.⁸⁵

The writers, equipped with fresh eggs acquired from the model farm, proceed to describe Konya's station and its environs prior to their northbound journey and its tenor is markedly similar to contemporaneous European accounts:

Konya Station is located at the foot of the city in a very nice place. The warehouse, benches, staff room, the special places to protect locomotives [depots] and other places as well in addition to the main station are really stupendous. When we had arrived in Konya it was night and this prevented us from seeing the buildings properly. As it is seen in the picture, the main station is an elegant building and its façade consists of a large sunshield to protect passengers from rain and sun. The other parts were built spectacularly as well. In particular, they built a well [water tank] next to the building. Asım Bey [the journal's photographer] fell in love with the beauty of its roof. So much so, that he was very upset that when he took the picture he could not fit the well in it as well.⁸⁶

⁸⁵ “Zaten o tarafa da gittikten sonra Konya’da görmediğimiz yer kalmıyordu. Çiftliğe varmak için şehrin çarşısını bir baştan bir başa kadar geçtik. Dükkanlarda mallar az ve görüntü fakirce idi. Çarşının pek büyük bir ticaretle meşgul olmadığı anlaşıyordu. Burada yalnız et gibi, yağ gibi zaruri ihtiyaçlardan olan şeyler gayet ucuzmuş. Padişahımızın gayretleri ile kurulan demiryolu sayesinde yerel ürünler büyük ticaret kapılarına gönderilerek şimdiki şu ucuzluktan kurtulmakla birlikte daha fazla memnuniyetle karşılanmaktadır. Tarım ürünlerini ve yağı şehirde tüketceklerin basit yararları uğruna, onları yetiştiren çiftçilerin büyük faydaları şüphe yok ki feda olunamaz... Örnek tarlası istasyon civarında üç müstakil binadan ibarettir ki resmini bu haftaki sayımızda görüyorsunuz. Buranın ıslah ve genişletilmesi için görevlendirilen kişilerin gayret ve özenleri sayesinde örnek alınacak bir örnek tarlası haline gelmesini dileriz.” Anonymous, “Osmanlı Demiryol Hattında Haydar Paşa’dan Konya’ya Bir Gezinti ‘Gidiş ve Dönüş: 1498 Kilometre’,” *Servet-i Fünun* 293 (22 Ekim 1312).

قبول ابتدك كه ذاته او جهته دخي كيتدكدن صوكره قوليه ده كورمديكمز بر قالميور ايدى. چفتكه وارمق ايچون شهرك چارسوسنى بر باشدن برباشه قطع ايلدك؛ دكانلر ده امتعه آز ومنظره فقيرانه ايدى؛ چارسونك پك بيوك بر تجارتله مشغول اولمديغي وهله اكلاشيليوردى. بوراده بالكر ات كى. باغ كى حوايج ضروريه دن اولان شيلر غايت اهون ايمش. سايه عمرانوايه جناب پادشاهيده وجوده كلن تيمور بولى سايه سنده محصولات محليه ابواب جسيمه تجارته سوق اوله رق شمديكى شواهوئيئك زائل اولمى طبيعى رضا زياده ممنونيلته نلقى به شاپاندر؛ زيرا اتى، ياغى شهرده استهلاك ايلييه جكلرك استفاده جزئيه لرى اوغورينه اونلرى يتشديرن اهل زراعت. فلاحتك استفادة كلييه لرى شبيهه بوق كه او ك مز.

⁸⁶ “Konya İstasyonu şehrin eteğinde ve güzel bir noktada bulunuyor. İstasyona ait ambar, tezgahlar, memurlar dairesi, lokomotif korumaya özel yerler, diğer mekanlarla beraber asıl istasyon binasının tamamı gerçekten heybetlidir. Konya’ya ulaştığımız vakit geceye denk gelmemiz şu binaları hakkıyla görebilmemize mani olmuştu. Resminde dahi görüldüğü üzere asıl

Leaving Konya, the writers describe the route between that city and Akşehir with verve and simplicity:

We left the city of Konya, which is 1000 meters above sea level, behind. Its cyan dome was still shining. We were running on the iron bars [rails] – which form the railway - at a speed of more than 40 kilometers [per hour (presumed)]. The railway from Konya to Kütahya passes troublefree through valleys and there are no industrial works like bridges or tunnels. Now we are in the large cultivated Konya Plain. Herds of animals are seen everywhere. Sometimes we come across buildings built of stone or adobe. 51 minutes later we stopped at the Pınarbaşı station which is considered as one of the resorts of Konya. Far away in the trees, a beautiful village was embellishing the view. There are turns in the track that can be considered as important on the way to second station, Meydan. I suppose that the railway reaches the top [of the hill] through the turns. It climbs them slowly. We went from one mountain to another. These mountains led us to a plain other than the Konya Plain. This part was completely cultivated. Sometimes we saw small villages. We arrived at Sarayönü Station at 2:35. We stopped at Kadınhanı station at 3:25. The Kadınhanı subdistrict station was far away. We were informed that the people of this sub-district are quite rich and honorable. There must have been there a great number of students [because] a large number of students got on our train [there]. Here they put cereal in a wagon. At the same time, they were loading wheat into the bags in the warehouse of the station. As we understood it, cereal was transferred from the bags of the hired farmers to the new and nice bags of the company. [This is] to prevent harm to the cereal from ragged bags in transport. After Kadınhanı the first station is Ilgın, which is located in the Konya region as well. We saw nice trees on the route to Ilgın. Ilgın is located in the middle of a large plain. When we arrived there it was 4:25. There is a second class station in Ilgın. No doubt about it that [the city's] importance will increase due to great productiveness of the region. Some passengers got on our wagon at Ilgın station. We started to eat our breakfast while watching Ilgın Lake. The Lake is really stunning. Some people said that because the part which looks onto the city is reed and marsh, that it pollutes the air. It was not very difficult to sense the bad air. After Ilgın, the railway follows the lakeshore continuously. There were herds of ducks flying on the Lake. I was excited. I looked enviously at these ducks running between reeds and the birds flying around them. There was not any point from Ilgın to Akşehir to indicate [the latter] as the well-known city of the deceased Hoca Nasreddin. We were driving at a speed no less than 40 kilometers [per hour (presumed)]. These who got on our wagon in the district of Ilgın were officers. They understood from our conversation that we are journalists and they gave us their salutations: as a matter of fact, the District Governor, who was in the other wagon obliged to come [meet us] at Çavuşçuköy Station. The District Governor, an old kind and elegant man, expressed that he was a follower of our newspaper. He told us that he was going to Akşehir to see his children. He wanted to put

istasyon zarıf bir binadır ki, ön tarafı yolcuları yağmurdan, güneşten korumak için geniş bir saçlıktan meydana gelmektedir. Diğer bölümler de göz alıcı bir şekilde yapılmıştır. Hele binanın yanındaki bu kuyuyu yapmışlar. Bunun çatısındaki güzelliğe bizim Asım Bey aşık oldu. O kadar ki resmi çekerken kuyuyu içine almıyor diye çok üzülyordu.” Anonymous, “Osmanlı Demiryol Hattında Haydar Paşa’dan Konya’ya Bir Gezinti ‘Gidiş ve Dönüş: 1498 Kilometre’,” *Servet-i Fünun* 293 (22 Ekim 1312).

us up since we will spend one night in Akşehir as well and we thanked him for it. Our intention was to stay at the hotel and wake up early and stroll the city, especially to visit the tomb of deceased Hoca [Nasreddin]. Allow me to account the rest of our travel to the famous tomb of Hoca Nasrettin Hoca next week. If Allah permits, you will see the pictures of the inside and outside of the tomb in the next issue.⁸⁷

⁸⁷ “Deniz yüzeyinden 1000 metre yukarıda olan Konya şehrini arkada bıraktık. Cam mavisi kubbe hala parlıyor. Biz ise saatte 40 kilometreden fazla bir hızla-demiryolunu oluşturan- demir çubuklar üzerinde koşuyorduk. Konya’dan Kütahya’ya kadar demiryolu hep arızasız vadilerden geçiyor, köprü gibi, tünel gibi sanayi eserleri yok. Şimdi yolumuz ekili geniş Konya Ovası içindedir. Her tarafta sürü sürü hayvanlar görünüyor. Ara sıra eskilerin hatırası olan birtakım taş ve kerpiç binalara, zincirli kuyulara rast gelip geçiyor. 51 dakika sonra Konya’nın gezilecek yerlerinden sayılan Pınarbaşı İstasyonunda durduk. Ta uzakta ağaçlar, güzel bir köy görüntüyü süslüyordu. İkinci İstasyon olan Meydan’a giden yolda gayet önemli sayılabilecek virajlar var. Sanırım demiryolu virajlar halinde en yükseğe ulaşmış. Böylece yavaş yavaş yükseliyor. Bir dağdan diğerine geçiyorduk. Bu dağlar bizi Konya Ovasından başka bir ovaya çıkardı. Bu taraf tamamen ekiliydi. Ara sıra ufak ufak köyler, görüyorduk. Saat 2:35’te Sarayönü İstasyonu’na geldik. Saat 3:25’te Kadın Hanı İstasyonu’nda durduk. Kadınhanı Bucağı İstasyonu hayli uzakmış. Bu bucak halkının oldukça zengin ve itibarlı olduklarını haber veriyorlar. Öğrencileri pek çok olmalı ki istasyondan trenimize çok sayıda talebe bindi. Tren buradan bir vagona tahıl aldı. Bir taraftan da çuvallara istasyonun ambarından buğday dolduruyorlardı. Anladığımıza göre tahıllar, şirketin çiftçilere kira ile verdiği yeni ve güzel çuvallarla aktarılıyor. Böylece eski püskü çuvallar içinde tahıl naklindeki sakıncalar da engellenmiş oluyormuş. Kadınhanı’ndan sonra ilk İstasyon yine Konya arazisinde yer alan Ilgın kazasıdır. Ilgın’a ulaşınca kadarki güzergahta zarif ağaçlı yerler seyrettik. Ilgın geniş bir ova ortasında kurulmuştur. Oraya vardığımız zaman saat dördü yirmi beş geçiyordu. Ilgın’da ikinci sınıf bir istasyon binası var. Civarın fevkalade verimli olması nedeniyle yakında buranın önemini artıracığından şüphe yoktur. Ilgın istasyonumuzda vagonumuza birkaç yolcu girdi. Biz sabah yemeğine başlamış ve bir yandan da Ilgın Gölü’nü seyre dalmıştık. Göl gerçekten göz alıcıdır. Şehre bakan tarafı sazlık ve bataklık olduğu için havayı kirletmiş olduğunu bazı kişiler söylediler. Civarın kötü havasını anlamak zaten pek de güç değildi. Ilgın’dan sonra demiryolu hep gölün sahilini takip ediyor. Gölde kümelerle ördekler uçuyordu. Heyecanım arttı. Kah sazlar arasından kaçışan şu ördeklere, kah etrafta uçan kuşlara ne kadar hırs ile bakıyordum. Ilgın’dan rahmetli Hoca Nasrettin’in meşhur şehri olan Akşehir’e kadar civarda açıklamaya değer manzara yoktur. Saatte 40 kilometreden aşağı olmayan bir hızla gidiyordu. Vagonumuza binen kişiler Ilgın kazası memurlarındanmış. Aramızdaki konuşmalardan basın yayını işiyle uğraştığımızı anladılar, iltifat ettiler: Hatta Çavuşçuköy İstasyonu’nda diğer vagona bulunan Kaymakam beyefendi dahi lütfedip yanımıza geldiler: Gazetemizin eskiden beri takipçilerinden olduklarını ifade eden Kaymakam beyefendi nazik ve zarif bir kişidir. Çocuklarını görmek üzere Akşehir’e kadar gideceklerini anladık. Akşehir’de biz de bir gece geçireceğimiz için bizi misafir etmek isteseler de biz buna teşekkür ettik. Amacımız kolay bir şekilde otelde kalıp erkenden şehri gezmeye çıkmak, hele rahmetli Hoca’nın türbesini ziyaret etmektir. Artık müsaadenizle seyahatimizin devamını meşhur Nasrettin Hoca’nın bilinen türbesini nasıl ziyaret ettiğimizi gelecek haftaya bırakalım. Türbenin iç ve dış kısımlarına ait resimlerini de inşallah öbür sayıda göreceksiniz.” Anonymous, “Osmanlı Demiryol Hattında Haydar Paşa’dan Konya’ya Bir Gezinti ‘Gidiş ve Dönüş: 1498 Kilometre’,” *Servet-i Fünun* 293 (22 Ekim 1312).

سطح بحردن بيك متره ارتفاعده اولان قونيه شهر بنى أرفه ده براقق؛ "قبة ميناquam" حالا تنوير عيون ايليور، بزايه ساعتده فرق كيلو متره بى متجاوز بر سرعتله بر خط مستقيم تشكيل ايدن دمير چبوقلر اوزرنده قوشيوروق. قونيه دن کوتاهبه به قدر خط هپ عارضه سز واديلرن كچيور؛ كوپرى كى . نونل كى اثار صنايعيه بوق. شمدي بولمز مزروع واسع قونيه اوواسى داخلنده در . هر طرفده سورى سورى حيوانات موربيور، آره صره يادكار اسلاف اوله رق خان بقيمى بر طاقم

Upon arrival in Akşehir, the writers describe the station's distance from the city center, a common occurrence for the new railway stations and part and parcel of the often complicated circumstances surrounding the acquisition of land endeavored by Deutsche Bank and the Anatolian Railway Company:

We headed for the station. The station of Akşehir is half an hour away from the town. The road from town [to the station] is in bad condition. I searched for the reason of why the stations are so far away. When the companies attempted to acquire a [piece of] land to build a station near the town, the proprietors showed their greediness and eagerness, asking for ten times the normal price, forcing companies to acquire lands far away. Consequently, they [the townsfolk] lose money and [wind up being located] far away from the station.⁸⁸

کارگیر بنالره، زنجبرلی قبولره راست کلوب کچیورز. الی دقیقه صوکره فونیه بک مسیره لرندن معدود اولان "پیکار بانی" موقفده دوردق. نا اوزاقده اغاجلر، کوزل بر کوی تزیین نظر ایلیور ایدی. ایکنجی موقف اولان "میدان" ه قدر یولده غایتله شایان اهمیت قویله وار؛ ظن ایدرم که خط قوس تشکیلنده حد اعظمی بولمش. بویله جه یواش یواش یوکلوز، برطاغن دیکربنه کچیوردق. بوطاغلر بزی قونیه اوواسندن بشته بر اووایه چیتار دی. بوجهت کاملاً مزروع ایدی: اره صره اوفاق اوفاق کویله کوریور ایدک. ساعت 2 دقیقه 35 ده "سرای اوکی" استاسیوننه کلمک؛ ساعت 3 دقیقه 25 ده "قادین خانی" موقفده دوردق. قادین خانی ناحیه سی موقفه خیلی اوزاق ایمش. بو ناحیه اهلینک اولدقجه اهل ثروت و فضیلت اولدقلرینی خبر ویریورلر، طلبة علمی پک چوق اولملی که موقفدن قطار مزه خیلی طلبه راکب اولدی. قطار بورادن برواغونه ذخیره آلدی؛ بر طرفدن ده چوواللره موقفک ابنارنده بوغدا دیلدیر یورلر ایدی. ا کلابغمز کوره ذخیره لر قومپانیه نک زراعه کرا ابله وبردیکی مجدد وکوزل چوواللره نقل ایدیلور، بویله جه اسکی پوسکی چوواللر ایچنده ذخیره نقلنده محذور دفع اولنیور ایمش. قادین خانندن صوکره ایلک موقف ینه قونیه ملحقاتندن ایلغین قضا سیدر. ایلغینه اصل اولنجه یه قدر کدرکاهه طریف، اغاجلی محللر سیر ابتدک. ایلغین واسع بر اووا وسطنده کانددر. اورایه واردیغمز زمان ساعت دردی یکر می بش کچیور ایدی. ایلغینه ایکنجی صنفدن بر موقف بناسی وار؛ جوارک فوق العاده منبت و محصورلدار بولنمسی قریباً بورانک اهمیتی تزیید ایده جکنده سبهه یوقدر. ایلغین موقفده واغونمزه برقاق یولجی کیردی؛ بز صباح طعامنه باتلامش وبر یاندن ایلغین کولنی تماشا به دالمش ایدک. کول حقیقه نظر ربادر؛ شهره تصادف ایدن جهتی سازلق و بطاق اولدیغی ایچون هوایی توخیم ایلکده اولدیغنی بعض ذوات سولدیله؛ جوارک وخامت هواسنی آکلامق ذاثا ده پککوج دکلدی. ایلغیندن صوکره خط هپ کولک ساحلنی تعقیب ایلیور، کولده کومه لرله اوردکلر اوچیور ایدی؛ عروق صیادانه م غلیانه کلدی، سازلر آره سندن قاقچیشان شو اوردکلره، کاه کاه اطرافده اوچان بقاسیه لره نه قدر حرص ابله باقیوردم. ایلغیندن خواجه نصر الدین مرحومک موطن شهیری اولان آقشهره قدر جوارده شایان تفصیل مناظر یوقدر. ساعتده قرق کیلو متره دن دون اولماق اوزره قطار مز بر طراکه هول انکیز ابله کیدیور ایدی. واغو نمزه راکب اولان ذوات ایلغین قضا سایی مأمور یندن ایمشلر. میانه مزده آچیلان سوزدن خدمت تشریه ده بولند یغمزی اکلا دیلر، التفات بیور دیلر: حتی چاوشجی کوبی موقفده دیکرواغونده بولنان قائممقام بک افندی دخی لطفاً یانمز کلدیلر: غزنه مزک محب وفا کارلرندن اولدقلرینی بیان بیوران قائممقام بک افندی نازک و ظریف برذاتدر. مخدوملرینی کورمک اوزره آقشهره قدر کیده جکلرینی اکلا دق. آقشهره بز دخی برکیجه کچیور جکمز ایچون حقمز ده اثار مهمان بروری ابرازینه همت بیوردیلر سه ده عرض تشکر ایلدک. مقصدیمز ازاده برطرزده اولتده بیتوتت ابله ارکندن شهری کزمکه چیقماق، هله خواجه مرحومک تر به سنی زیارت استمک ایدی. آرتق مساعده کزله سیاحتیمک قسم متباقیسنی: خواجه مشهورک تر به معروفه سنی نصل زیارت ایلدیکمزی کله جک هفته یه بر اقه لم؛ تر به نک داخلی و خارجی رسملر ینی ده ان شاهه او بر نسخه ده تماشا بیور رسکز.

⁸⁸ "İstasyona müteveccih olduk. Akşehir'in istasyonunu dahi kasabaya yarım saat kadar uzak bir mesafededir. Kasabadan oraya kadar yollar pek fenadır. Mevkıflerin böyle uzak olmasındaki hikmeti tedkik ettim. Kumpanyalar kasaba kenarında mevkıf inşa etmek için istimlak-i araziye teşebbüs edince ashab-ı emlak umumi fiyatın nisbeten on katını istemek gibi asar-ı hırs ve tama göstererek şirketi uzakta istimlak-i arazi etmeye mecbur bırakmakta ve böylece kendilerini zarara, kasabayı mevkıftan uzağa düşürmektedirler." Anonymous, "Osmanlı Demiryol Hattında Haydar

After an unpleasant night in Akşehir and an only mildly succesful visit to the tomb on Hoca Nasreddin, the reporters proceed to Afyonkarahisar, a city which captures their imagination:

Imagine a high mountain with vertical rocks on all four sides. Then put this piece of stone on the foot of another mountain. Within the valley created, populate the foot of that mountain and four sides of the rock with clay-roofed houses very densely: you've got [Afyon]karahisar. There is a plain before it and small hills from pieces of stone around the town. When you look around, you don't see any green plants, [just] the unique color of natural beauty. Apparently, that is why the town was named as 'Karahisar' (black castle). The name 'Hisar' [castle] was given for the amazing fortress built on top of the piece of rock in the center in the old times. The railway station is built very close to [Afyon]karahisar, just before the town. The station is rather large which reflects the importance of its location. Furthermore, there are buildings for locomotives and railway cars [workshops], warehouses, and a depot. There is even a nice restaurant and hotel on one side of the station building.⁸⁹

Paşa'dan Konya'ya Bir Gezinti 'Gidiş ve Dönüş: 1498 Kilometre',” *Servet-i Fünun* 294 (17 Teşrinievvel sene 1312).

استاسیونه متوجه اولدق، آقشهرک استاسیونی دخی قصبه یه یاریم ساعت قدر اوزاق برمسافه ده در؛ قصبه دن اورایه قدر یوللر پک فنادر. موقف لرك بویله اوزاق اولمسنده کی حکمتی تدقیق ایتدم. قومپانیه لر قصبه کنارنده موقف انشا ایتمک ایچون استملاک اراضی به تشبث ایدنجه اصحاب املاک عمومی فیأنک نسبة اون قاننی استه مک کی آثار حرص و طمع کویستره رک شرکتی اوزاقده استملاک اراضی ایتمه مجبور براقمقده وبوبله جه کندیلرینی ضرره، قصبه بی موقعدن اوزاغه دوشورمکده درین.

⁸⁹ “Evvel emirde dikine yüksek ve kayadan mürekkeb bir dağ tasavvur ediniz ki dört tarafı da aynı şekilde kesme kayalardan müteşekkil olsun. Sonra bu senkporeyi çıplak başka bir dağ eteğine vaz ediniz. Teşekkül eden boğazın içinde o dağın eteklerini, kayanın cevanib-i erbaasını toprak damlı yeğrenik evlerle – fakat gayetle sık olarak- doldurunuz. İşte size Karahisar. Ön taraf bir ova, lakin yine bir takım sengparelerden ötesinde berisinde tepelikler hasıl olmuş. İleri doğru medd-i nazar ederseniz letafet-i tabiiyyenin reng-i mahsusı bulunan yeşilden eser yoktur. Zahir bundan dolayı kasabaya “Karahisar” namını vermişler. Hisar ünvanı ise ortadaki o sengpâre-i mehîbin ta zirvesinde eslâfın vücuda getirdiği bir kala-i hayret-âverden mehuzdur. Demiryol mevkıfı Karahisar’da şehre pek yakın, adeta pışgâhında kairdir. Mevkıf mevkiin ehemmiyetiyle mütenasib olarak cesim olduktan başka lokomotif ve vagon muhafazasına mahsus ebniyeler, depolar, antrepolarla dahi müzeyyendir. Hatta mevkıf binasının bir tarafında güzel bir lokanta ve otel bile mevcuttur.” Anonymous, “Osmanlı Demiryol Hattında Haydar Paşa’dan Konya’ya Bir Gezinti ‘Gidiş ve Dönüş: 1498 Kilometre’,” *Servet-i Fünun* 295 (24 Teşrinievvel sene 1312).

اول امرده دیکینه یوکک وقیادن مرکب برطاغ تصور ایدیکزکه درت طرفی ده عین شکله کسمه قیالردن متشکل اولسون، صوکره بوسنکپاره بی جیلاق بشقه بر طاغ اتکنه وضع ایدیکز؛ تشکل ایدن بوغازک ایچنده، اوطاغک اتکلربی، قیامک جوانب اربعه سنی طیراق طاملی یکرنگ اولرله فقط غایتله صیق اوله رق دولدیر. یکز؛ اشته سزه قره حصار. اوک طرف بر اووا، لکن بنه بر طاقم سنکپاره لردن اوته سنده برینده تپه جکر حاصل اولمش؛ ایلری دوغری مد نظر ایدرسه کز لطافت طبیعییه نک رنگ مخصوصی بولنان بشیلدن اثر یوقدر، ظاهر بوندن دولابی قصبه به "قره حصار" نامنی ویرمشلر؛ حصار عنوانی ایه اورته ده کی اوسنکپاره مهیک نا ذروه سنده اسلافک وجوده کتیردیک بر قلعه حیرت آوردن مأخوذر. دمیر بول موقعی قره حصار ده شهره پک یقین، عادتاً بیشکاهنده کائندر. موقف موقعک اهمیتیه متناسب اوله رق جسیم اولد قدن بشقه او

Unlike in Akşehir, the road connection from Afyonkarahisar's station to its inner city is well planned but the journalists note the city's curious architecture, which appears at odds with its new status as a modern transportation hub:

A nice highway is being constructed from the station to the inner parts of the town. We arrived at the government building which was opposite the bazaar area. The [Afyon]karahisar government building was rather like a ruin compared to the ones we had seen before. In particular, I was unable to understand the strange separation in its quite high and vaulted ceiling. The construction of a stone building was visible from the window of the room where we were sitting. When we found out that this was a prison, we considered the accomplishment worthy of congratulations and reiterated our hope that the government building should also undergo such a change. We arrived at the house where we stayed as a guest in the evening. Although it was much better than most of the buildings in the [Afyon]karahisar, it was still very cramped like all quarters of [Afyon]karahisar. Except the newly built houses imitating the railway station, you can't find any house with spacious aspects in [Afyon]karahisar.⁹⁰

قوموتيف وواغون محافظه سنه مخصوص ابنیه لر، ده بولر، آنتربولرله دخی مزیندر . حتی موقف بناسنک بر طرفنده کوزل بر لوقطه واول بیلله موجوددر.

⁹⁰ “Mevkıftan şehir dahiline kadar güzel bir şosenin inşaatı devam eyliyor idi. Pazar meydanına nazır daire-i hükümete geldik. Karahisar hükümet dairesi şimdiye kadar gördüklerimize nisbetle hakikaten bir harabe halinde idi. Hele gayet yüksek ve kubbeli tavanındaki o garip taksimatına bir türlü akıl erdiremedim. Oturduğumuz odanın penceresinden cesim kargir bir binanın inşaatı seyrolunuyor idi. Bunun hapishane olduğunu anlayınca civarda emsali nâ-meşhud olmasından dolayı muvaffakiyet-i vakıayı şayan-ı tebrik gördük ve daire-i hükümetin dahi şöyle bir tahavvüle uğraması temenniyatını tekrarladık. Vakit akşam olmuştu. Misafir olacağımız haneye geldik. Burası kasabadaki sair ebniyelere nispeten mükemmel idiyse de mevkii Karahisarın tekml mahalatı gibi gayet kapalı idi. Demiryol mevkiflerini takliden şimdi yeni yeni meydana gelen evlerden maada Karahisar'da dört tarafı biraz müreffeh bina yoktur.” Anonymous, “Osmanlı Demiryol Hattında Haydar Paşa'dan Konya'ya Bir Gezinti ‘Gidiş ve Dönüş: 1498 Kilometre’,” *Servet-i Fünun* 295 (24 Teşrinievvel sene 1312).

موقفدن شهر داخلنه قدر کوزل بر شوسه نك انشا آتی دوام ایلیور ایدی، بازار میداننه ناظر دائرة حکومت کلدک . قره حصار حکومت دائره سی شمدی به قدر کوردکلر یمزه نسبتله حقیقه بر خرابه حالنده ایدی، هله غایت بوک وقیه لی طواننه، او غریب تقسیمانه بردرلو عقل ابردییره مدم. اوطوردیغمز اوطه نك بنچره سندن جسیم کارکیر برینانک انشا آتی سیر اولنیور ایدی، بونک حبسخانه اولدیغنی اکلانجه جوارده امثالی نامشهود اولمندن دولابی موفقیت واقعه بی شایان تبریک کوردک ودائرة حکومتک دخی شوبله بر تحوله اوغرامی تمنیاتی تکرارلدق. وقت اقشام اولمشیدی، مسافر اوله جغمز خانه یه کلدک؛ بوراسی قصبه ده کی سائر ابنیه لره نسبه مکمل ایدییه ده موقعی قره حصارک تکمیل محلاتی کبی غایت قیالی ایدی . دمیر بول موقفلرینی تقلیداً شمدی بکی بکی میداننه کلن اولردن ماعدا قره حصارده درت طرفی برآز مفرح بنا یوقدر. دیمشیدم . یالکز بول کوسترمک اوزره یانمزه برچوجق ویردیله، خدمتکار طاهر ده برابر اولمق اوزره اودن چیقندق؛ اول امرده برخیلی مدت نیچره لری همان بربرینه سورونه جک قدر یکدیگرینه یقین ابکی صره خانه ارمنده کی سوقاقده یورودک، اولرک کنارنده اغاج دکل بنچره لرنده برضا قصی بیلله بوق

The last city the journalists visit before arriving in Eskişehir is Kütahya, transferring at the terminus of that city's branch line at Alayunt. Although they arrive at night, their impression is one of general awe:

We were unable to see the town and station thoroughly in the night we arrived in Kütahya. Despite this, we passed by the school, barracks and government building while the carriage was taking us from the station to the guesthouse. We noticed the beautiful entry to Kütahya, rarely seen in other small towns. The impact of seeing beautiful buildings while entering a city or a town is indisputable. We entered the city passing through a gloomy cemetery. We then passed through beautiful buildings on a narrow road, something different which you can [also] experience in Kütahya. Therefore, our first impressions of Kütahya were positive.⁹¹

The mostly narrative approach to the Anatolian railways in the five-part series is presented in an entirely different format than the account of the Hejaz Railway across countless issues between 1900 and 1908. In all likelihood, this is because İhsan Tokgöz wished to market the Hejaz Railway as a distinctly national project. While the German aspects of the Hejaz Railway's construction do not go unmentioned, they are significantly downplayed. Most salient is the fact that the railway's progress is documented regularly, not merely post mortem, providing for a sort of baby album of its realization.

⁹¹ “Bir gece evvel Kütahya’ya girdiğimiz zaman kasabanın şekil ve heyetini, mevkıfı iyice göremedik. Mamafih mevkıftan bindiğimiz araba bizi misafir olacağımız haneye götürürken mektep, kışla daire-i hükümet gibi birçok güzel binaların önünden geçtiğimiz cihetle Kütahya’nın sair kasabalarda nadiren görülen bir hale yani güzel bir medhale malik olduğunu anladık. Vakıa bir şehir veya kasabaya girerken nazara evvela mebâni-i zarîfenin tesadüf etmesindeki tesir gayr-ı münkerdir. Kasvet-engîz bir mezaristan içinden geçerek şehre dahil olmakla Kütahya’da olduğu gibi güzel şoseler üstünden büyükçe binalar arasından geçmek beyrinde büyük fark vardır. Onun için Kütahya’nın fikrimizde hasıl ettiği ilk tesir iyi oldu.” Anonymous, “Osmanlı Demiryol Hattında Haydar Paşa’dan Konya’ya Bir Gezinti ‘Gidiş ve Dönüş: 1498 Kilometre’,” *Servet-i Fünun* 296 (31 Teşrinievvel sene 1312).

بر کيجہ اول کوتاہیہ یهکیردی کمز زمان قصبه نك شکل وهیئتتی ، موقفی اییجه کوره مدك، مع ما فيه موقفدن بیندیکمز عربہ یزی مسافر اوله جغمز خاله به کوتوررکن مکتب، قیشله دائره حکومت کبی برچوق کوزل بنالرك اوکندن کحیدیکمز جهلته کوتاهیہ نك سائر قصبه لرده نادرًا کوربلن برحاله یعنی کوزل برمدخله مالک اولدیغنی اکلاق . واقعا برشهر ویا قصبه به کبررکن نظره اولا مبانی ظریفه نك تصادف ایتمسندہ کی تأثیر غیر منکر در . قوت انکیز ومزارستان ایچندن کچه رك شهره داخل اولمقله کوتاهیہ ده اولدیغی کبی کوزل شوسه لر اوستندن ، ببوجکه بنالر "آره سندن کچمک بیننده بیوک فرق واردر . اونکچون کوتاهیہ نك فکر مز ده حاصل ایتد بکی ایلك تأثیر ایی اولدی؛ شو قصبه ده خیلی زمان بولنمش اولان بر ارقداشمزک ویردیکی معلومات ذاتًا دخی کوناهیہ نك لطافت طبیعیه سنی کوکلره چیقارییوردی؛ بناءً علیه لیلة موصلتمزک فرداسی ایچون مکمل جولانلره حاضر لنیوردق.

The images published by *Servet-i Fünun* are the most extensive visual account of the Hejaz Railway on record and comprise the vast majority of visual material documenting the railway's construction [Figs. 2.19–2.48]. In Issue 678, the journal declared the technicalist purpose of the Hejaz Railway as follows:

A large railway shall pass through the historic places of Arabia and through cradles of ancient cultures from north to the south one or two years later. This line shall serve to improve agriculture in Arabia and therefore the incomes of the Ottoman State shall also increase. The tribes living in this region shall learn about the contemporary culture thanks to this railway. It shall also serve commercial, agricultural and other purposes. It is one of the large and successful works of the respectable Sultan Abdülhamid II who made the design and implementation of this project possible. The great sultan's will and efforts for building and completing this railway deserve admiration.⁹²

Overall, the texts typically fell into the same laudatory genre while the photographic spreads fell into roughly five different categories: preconstruction landscapes, on-site labor, off-site industrial labor, structures under construction or recently completed (stations and bridges), and inaugural ceremonies and festivities. Seen together, they paint a picture of the transformation of the landscape from a primordial, mostly unfriendly, untamed “outback” into a landscape tamed through technicalism and

⁹² “Arabistan’ın binlerce senelik vekâyif-i tarihiyeyi ve medeniyet-i atîka âsârını hâvî bulunan aksâmından bir iki sene sonra şimalden cenuba doğru cesîm bir şimendifer hattı mürur edecektir. Bu hat Arabistan havalisindeki ziraatin fevkalade terakkisine hâdim olacak ve bu yüzden Devlet-i Âliyye varidatınca büyük bir menfaat husule gelecektir. Bu havalide meskun akvam, medeniyet-i hazırâya bu hat sayesinde vukuf peyda edeceklerdir. Ticaret ve ziraat ve sair hususatça büyük bir ehemmiyeti haiz bulunacak olan işbu şebeke-i hadidiyenin tasavvur ve kuvveden fiile ihracıyla azametli Abdülhamid Han-ı Sani hazretlerinin asar-ı celile-i muvaffakiyet-perverilerindendir. Zât-ı şevket-simât hazret-i padişâhînin bu hatt-ı mühimmin inşâ ve ikmâli için ibzâl buyurdıkları himemât-ı mülûkâne cidden sezâvâr-ı takdirdir.” Anonymous, “Hamidiye Hicaz Demiryolu,” *Servet-i Fünun*, Vol. 678 (8 Nisan 1320).

عربستانك بیکلرجه سنه لك وقایع تاریخیه بی ومدنیت عتیقه آثارینی حاوی بولنان اقسامندن برایکی سنه صکره شمالدن جنوبه طوغرو جسیم برشمندوفر خطی مرور ایده جکدر. بوخط عربستان حوالیسندن کی زراعتك فوق العاده ترقیسنه خادم اوله جق وبویوزدن دولت علیه وارداتجه بیوک برمنفعت حصوله کله جکدر. بو حوالیده مسکون اقوام، مدنیت حاضره یه بوخط سایه سنده وقوف پیداایده جکدر در. تجارت وزراعت وسائر خصوصاتجه بیوک براهمیتی حائز بولنه جق اولان اشبو شبکه حدیدیه نك تصور وقوه دن فعله اخراجیله الیوم مهم برقسمنك اکمال ایدلمسلی مجرد حلیفه اسلامیان شوکتلو عظمتلو عبدالحمید خان ثانی حضرتلرینك آثار جلیله موفقیت پوریلرندندر. ذات شوکتسمات حضرت پادشاهی نك بو خط مهمك انشا واکمالی ایچون ابذال بیورقلری هممات ملوکانه جدًا سزاوار تقدیردر.

hard work, not dissimilar to the concurrent compilation of the laudatory Abdülhamid albums. Either in gestation or when they are complete, the structures conquering the landscape are memorialized in choreographed photographs whose reverent tone and sense of completeness work to buttress a sense of loyalty and support for both the Caliph-Sultan and Western technology. Another issue, this one published in 1908, focuses on the construction progress at Haydarpaşa: its port facilities, the quay, and the station building [Figs. 2.49–2.54].

The railways, their land, and the construction process were internally documented in the Ottoman empire nowhere better than in the pages of *Servet-i Fünun* between 1892 and 1919. The accounts of the railways—the Baghdad Railway and the Hejaz Railway—are presented with very different expository strategies, the former with notably less frequency. Whereas the Baghdad Railway is presented as a project of progress and modernization for İstanbul and Anatolia through European (German) expertise, the Hejaz is considered in far greater detail, both in words and images, as a project of imperial and pious fortitude, one that tamed the wild and occasionally exotic Ottoman “outback” and that revealed as much about the land the railway traversed as it did the context and mechanics of its construction.

2.5 Wilhelm von Pressel and the Geographic Image of Bosnia in 1873

Not long after the completion of the Banja Luka-Dobrljin line in 1874, Wilhelm von Pressel continued the work of surveying Bosnia, which ought be understood as a project with distinct semicolonial aspects for its author, a dedicated Habsburg engineer,

as it was occurring on the eve of Bosnia's occupation by the Austro-Hungarian empire in 1878.⁹³ Von Pressel's archives detail his extensive work in the country in 1873, which involved significant surveys of Bosnia's poorly developed and mountainous terrain.⁹⁴ Von Pressel's archives include an 1873 study by Geiger and Lebret, *Studien über Bosnien, die Herzegovina und die bosnischen Bahnen* (Study of the Bosnia, Herzegovina and the Bosnia Railways). The article itself, as well as correspondence with its illustrator, "R. v. Waldheim art Anst. Wien," indicates that von Pressel's studies provided the knowledge behind the article's descriptive exposé on the significant architectural and infrastructural sites of Bosnia.⁹⁵ The article illustrates several choice scenes from the geographic landscape in Bosnia and Herzegovina, all depicted in black and white lithographs in a typical, picturesque illustrative style. A discussion of six depictions follows.

The images open with a view of the wooden bridge over the Lim River in the hamlet of Prijepolje, part of the old trade route to İstanbul (today in Serbia; "Holzbrücke über den Lim bei Prijepolje an der alten Route nach Constantinopel") [Fig. 2.55]. The image suggests that the classical form of the wooden bridge, distinct by virtue of its horizontal striping, is notable for its mimicry of typical Roman-style stone bridges, with its thickened piers and upside-down beveled V-shaped archways. On the left side of the

⁹³ A succinct contextualization of the political events can be found in A. J. P. Taylor, *The Habsburg Monarchy, 1809-1918* (Chicago; London: The University of Chicago Press, 1976 [paperback edition, orig. 1948]), 153-55. For an informative study of the construction of the Bosnian railways as they related to the tumultuous decades of Bosnia's political history, see Helga Berdan's diploma thesis "Die Machtpolitik Österreich-Ungarns und der Eisenbahnbau in Bosnien-Herzegowina, 1872-1914" (Dipl. thesis, Universität Wien, 2008).

⁹⁴ See files for these studies in DM NL 13 II/21.

⁹⁵ Geiger and Lebret, "Studien über Bosnien, die Herzegovina und die bosnischen Bahnen" (Vienna, 1873). Located in DM NL 13II/26.

image, the bridge terminates at a pair of buildings, suggesting the presence of a gate. The dramatic, sharply cleaved mountains are set against the pristine river, while a demure minaret, a unifying feature of all of the images, connotes not only the Muslim context but also the relative scale of the human settlement, in this case one that is quite small.

The second image is of the famous 16th century Ottoman stone bridge over the Drina River in Serbia, along the new trade route to İstanbul (“Steinbrücke über die Drina bei Visegrad an der neuen Route nach Constantinopel”) [Fig. 2.56].⁹⁶ The refinement of the bridge with its slender cone-shaped piers and pointed arches is the emphasis in this image. At the apex of the bridge stands a guardhouse, illustrating that the territoriality of the city reaches not only the riverbank but also that which abuts it.

The third image is a portrait of Banja Luka itself from the Verbas River (“Stadt Banjaluka am Verbas”) [Fig. 2.57]. The bridge at the center of this image is a simple arched Ottoman bridge with a wooden railing. What grabs the viewer’s attention in the image is the undulating skyline, replete with three minarets as well as what appear to be two 16th or 17th century clocktowers reappropriated as part of the central mosque, one in the center of the image and one flush to the right. The riverbank appears to be a hub of urban activity where women can be seen doing their wash while a man on horseback allows his horse to stop for a drink on the left bank. Toward the right bank a watermill spins, perhaps providing energy for a nearby factory.

The fourth image is of the bridge over the Miljacka River gorge near Sarajevo, part of the old trade route to İstanbul (“Brücke bei Serajewo [sic] über die Miljackaschlucht an der alten Route nach Constantinopel”) [Fig. 2.58]. The image depicts

⁹⁶ The bridge would later be memorialized in Ivo Andrić’s *Bridge on the Drina*, 1st English ed. (Chicago: University of Chicago Press, 1977).

a single-span arch with two circular openings on either side spanning a deep ravine and fast-flowing water below. Three graves and several sheep or rams are evident in the foreground, with their herdsman further uphill. The image, while pastoral, implies its suburban quality through the sheer amount of both human and animal traffic that is depicted.

A fifth image is of a Greek Orthodox church on the way to Banja Luka in the Lim River valley (“Griechische Kirche zu Banja im Limthale”) [Fig. 2.59]. This is the first of the images not to depict a river, and the elegant Greek church, notable for its deep portico of three arches, pitched frontal and side projections, and pair of circular clerestory steeples rising to the same height, is placed front and center. Also of note are ruins of the corner of a building to the left of the church. A pair of what seem to be priests appears in front of the building as farmers pass in both directions. Two buildings, one with a chimney spewing smoke, mark the background. Their proximity to the otherwise pristine landscape implies the church’s status as a monastery with noncontiguous residences.

The final image is a view of the church and market square in the city of Pljevlja (Turkish: Taşlıca; “Ansicht der Kirche und des Marktplatzes der Stadt Taslidje”) [Fig. 2.60]. The image centers on the broad open area of the city’s marketplace, which stands next to a small Muslim cemetery visible in the foreground. The low-rise building in the background, presumably a sweep of covered market stalls, stands immediately in front of and attached to a tall stone structure with a faceted dome and two adjunct vertical projections below it. The structure would appear to be a Baroque church, save for the

projections, a dome, topped with crescents and, most notably, the presence of a massive freestanding pencil-shaped minaret to the left, which dwarfs everything around it.⁹⁷

Geiger and Lebret's study can be seen as a provisional attempt to index Bosnia and Bosnian geography, an effort that in 1873 may have anticipated the expectation that Austria-Hungary would occupy Bosnia-Herzegovina in order to prevent the separatist sentiments of the region from falling under a Russian sphere of influence and hence fracturing the strategic German-Austro-Hungarian-Ottoman corridor. As A. J. P. Taylor has called it, Bosnia-Herzegovina effectively became Austria-Hungary's "white man's burden."⁹⁸ Whereas other European colonial empires were exporting its experts – engineers, archaeologists, ethnographers – to Africa, Austria-Hungary's limited resources and continental influence delimited its expansionist impulses to the contiguous territory of Ottoman Bosnia, with the sole territorial expression of the "common monarchy."⁹⁹ As Taylor notes "[t]he two provinces received all the benefits of imperial rule: ponderous public buildings; model barracks for the army of occupation; banks, hotels, and cafés; a good water supply for the centres of administration and for the country resorts where the administrators and army officers recovered from the burden of empire."¹⁰⁰ Part of the burden of safeguarding Ottoman Bosnia from complete dissolution was knowing its physical character, a need Geiger and Lebret's study pre-emptively served, despite the

⁹⁷ The structure is the old Čaršija (bazaar) and the attached main church, which was converted to a mosque under Ottoman rule. The freestanding minaret was the tallest minaret in the Balkans. See Türk Tarih Kurumu Basımevi, *Vakıflar Dergisi*, vol. 3 (İstanbul: Türk Tarih Kurumu Basımevi, 1956), 176.

⁹⁸ Taylor, *The Habsburg Monarchy*, 153

⁹⁹ Ibid.

¹⁰⁰ Ibid.

rampant misattributions of monuments that were, in fact, Ottoman as Roman. This documentation, as will now be demonstrated, was not without its synthetic goals.

2.6 “In Wort und Bild”: The Legacy of the German Construction of the Ottoman Railways of Bosnia in the *Kronprinzenwerk*

The Austro-Hungarian occupation of Bosnia-Herzegovina lasted until proper annexation in 1908. But the imperial officials had already been hard at work on making Bosnia their own. As Taylor notes that “even the public buildings were in a bastard-Turkish style, truly expressive of the imperial spirit.”¹⁰¹ The so-called “bastard-Turkish” style was, in actuality, an orientalizing effort that drew equally upon the burgeoning developments of the architectural genre in the empire proper as it did the new knowledge of Ottoman (as well as pre-Ottoman) architecture in Bosnia as it was found in Geiger and Lebrecht’s study.

The major effort of cultural indexing, however, came after the occupation. In 1883, Crown Prince Rudolf of Austria-Hungary initiated one of the greatest works of modern geography and ethnography, the massive, beautifully illustrated 24-volume *Kronprinzenwerk*.¹⁰² The work and its images have been studied extensively, but no study

¹⁰¹ Ibid., 154.

¹⁰² There is an excellent body of literature on the geographic, ethnographic, and visual aspects of the *Kronprinzenwerk*. See James Shedel, “The Elusive Fatherland: Dynasty, State, Identity and the *Kronprinzenwerk*,” in *Inszenierungen des kollektiven Gedächtnisses*, eds. Moritz Csáky and Klaus Zeyringer (Innsbruck: StudienVerlag, 2002); Christiane Zintzen, “Das *Kronprinzenwerk*: Die österreichisch-ungarische Monarchie in Wort und Bild: Ein deliberater Rund- und Umgang mit einem enzyklopädischen Textkosmos,” in *Literarisches Leben in Österreich 1848–1890*, eds. Klaus Mann, Hubert Lengauer, and Karl Wagner (Vienna: Böhlau, 2000); Christiane Zintzen, *Die*

to date has focused on the particularities of Volume 22 on Bosnia and Herzegovina, which was published in 1901 and repeatedly stresses the existing and emerging railways of Bosnia and Herzegovina as the major force for the region's modernization, one that could effectively turn the former Ottoman region into an orderly model colony of Austro-Hungarian dominion that would exemplify how, despite the doubts of many detractors, the empire could stymie Slavic nationalism as well as potential resistance from its Muslim subjects.¹⁰³ Between 1878 and the publication of Volume 22, this had actually worked fairly well, and the volume, perhaps the set's most fascinating, captures a moment of tremendous optimism about Bosnia's potential as a positive multicultural experiment, like none other in Europe, where modernity functioned as the new and binding infrastructure. There are also, to be sure, colonial aspects to the volume that give a glimpse into the short-lived yet very real political mindset of the sole example of a European empire effectively colonizing Ottoman territory (as opposed to a national movement, as in Bulgaria or Greece).

Volume 22, which was simultaneously published in Hungarian, circulated widely in Austria as well as the German empire, and the sections covering the cultural geography of the region, which tended to gloss over the most recent (and highly significant) changes implemented by the Dual Monarchy, would become the most in-depth cultural geographic account of an Ottoman population to date. In addition to the consistent

österreichisch-ungarische Monarchie in Wort und Bild: Aus dem "Kronprinzenwerk" des Erzherzog Rudolf (Vienna: Böhlau, 1999).

¹⁰³ *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901). Relevant pages include: 18, 20, 36, 39–41, 43–6, 76–8, 82, 97–8, 102, 104, 108–10, 112, 120–2, 124–7, 129–30, 137, 152, 200, 231, 268, 296, 426, 428, 430, 436, 452, 472–4, 476, 484, 486–7, 496, 499–500, 502, 504–6, 508, 574.

references to the railways, the volume's authors take particular care to document and describe the Ottoman monuments of Bosnia and Herzegovina, which an assortment of illustrators constructed as lithographs for the volume's plates. The text's constant praise of rail development and the modernity it had brought and would continue to bring stands in stark contrast to the relatively timeless picture-book qualities of the myriad visualizations of Bosnia and Herzegovina's Ottoman landscape.

A significant portion of the ethnographic and geographic studies are devoted to the architecture and building arts of Bosnia-Herzegovina. Although later German-language studies in the field of art history are typically thought of as the first "scientific" studies of Ottoman architecture, the comprehensive descriptions and documentation of the Ottoman architecture of Bosnia in the *Kronprinzenwerk* may in actuality represent the first critical and analytical studies of the topic. It is noted, for example, that the Ottoman builders of Bosnia and Herzegovina dwarfed the "puny" Christian architecture in the region,¹⁰⁴ and several structures are described with a palpable reverence:

The favorable impression of these mosques whose domes are predominantly plated in lead, elaborate both architecturally and in their construction, are, with the exception of the domed vaults formed mostly by baked bricks, constructed with worked stone and barely any wood, is further elevated by their siting on open courts with shadowy trees and perforated enclosures through which appealing side objects like mosque fountains (Šadervan) for ritual washings, domed manfolees of the founders, cemeteries with beautiful monuments, and by structures whose functions regulate time with clocks (muvekit hana), for library purposes (kutub hana), freestanding clocktowers (sahat kula), school buildings (Medreesse), oriental vaulted shops, all which connect to the enclosure or enclosing walls of individual buildings, whereby in association with oriental life and its going ons, which happens near larger mosques, that idiosyncratic charm arises, which nobody, who devotes any attention to these structures, can elude.¹⁰⁵

¹⁰⁴ *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. XXII, *Bosnien und Hercegovina*, 413.

¹⁰⁵ *Ibid.*, 415: "Der günstige Eindruck dieser constructiv und architektonisch wohldurchdachten, vorwiegend mit Bleiplatten gedeckten Kuppelmoscheen, zu deren Herstellung, mit Ausnahme der zumeist aus gebrannten Ziegeln gebildeten Kuppelgewölbe, nur bearbeiteter Stein und fast gar kein Holz verwendet ist, wird noch durch die Situierung [sic] derselben auf freien Plätzen mit

There are twelve plates in the volume that hone in on what could be considered specifically architectural or urbanistic information. Page 47 contains an etching of Sarajevo, which had been connected with the Bosnian railway network in 1905,¹⁰⁶ from atop a bluff to the east [**Fig. 2.61**]. Placed squarely in the center of the composition amidst the minarets and low-slung wooden housing of the city along the Miljacka River is the new city hall, a recent addition to the city's landscape, originally designed by the Austro-Hungarian architect Alexandar Wittek¹⁰⁷ (1852–1894) and executed by the Croatian architect Ćiril Metod Iveković¹⁰⁸ (1864–1933) and completed in 1896. The railway station and line [**Fig. 2.62**], situated atop a high contour in the southern district of Bistrik, are rendered camouflaged by the greenery so as not to disrupt the picturesque architectural vista.

In the section describing the landscape of Bosnia and Herzegovina's most important cities, page 199 [**Fig. 2.63**] depicts what would become Bosnia's most iconic

schattigen Bäumen und durchbrochener Umfriedung, durch die oft reizenden Nebenobjecte [sic], als Moscheeburgen (Šadervan) für rituelle Waschungen, Kuppelmanfolees der Gründer, Friedhöfe mit schönen Grabdenkmalen, durch Gebäude für Regulierung [sic] der Uhren nach türkischer Zeit (muvekit hana), für Bibliothekszwecke (kutub hana), durch nahegelegene freistehende Uhrthürme [sic] (sahat kula), Schulgebäude (Medreese), orientalische Kaufgewölbe (dučan), welche an die Umfriedung oder an die Umfassungsmauern einzelner Gebäude anschließen, gehoben, wodurch im Vereine mit dem orientalischen Leben und Treiben, welches sich bei größeren Moscheen abspielt, jener eigenthümliche [sic] Zauber entsteht, welchem sich niemand entziehen kann, der diesen Anlagen nur einige Beachtung widmet."

¹⁰⁶ See "Die Entwicklung des bosnisch-herzegowinischen Bahnnetzes," *Danzers Armee-Zeitung*, November 12, 1903.

¹⁰⁷ See mention of Wittek in Emily Gunzburger Makaš, "Sarajevo," in *Capital Cities in the Aftermath of Empire: Planning in Central and Southeastern Europe*, eds. Emily Gunzburger Makaš and Tanja Damjanović (Abingdon: Routledge, 2010), 251–52.

¹⁰⁸ More on Iveković can be found in Slavica Marković, *Ćiril Metod Iveković: Arhitekt i Konzervator* (Zagreb: Društvo Povjesničara Umjetnost Hrvatske, 1992).

site: the bridge of Mostar (Stari Most), a sixteenth-century structure built by a student of Mimar Sinan, Mimar Hayreddin (fl.1550–1570). Page 421 depicts the most splendid work of Ottoman architecture in the region, the Gazi Hüsrev Bey Mosque of the Bašćaršija district, which, according to the section’s author as well as illustrator Rudolf Bernt (1844–1914), perfectly depicts the fundamental elements of Ottoman architecture on both its exterior [Fig. 2.64] and its interior [Fig. 2.65]. Bernt goes on to document the entry and inner court of the nearby Gazi Hüsrev Bey Madrasa, honing in on the entry’s unique amalgamation of its muqarnas portal, its ashlar masonry, its lead-covered low domes, and its elongated conical-top chimneys [Fig. 2.66].

On page 427, Bernt writes of “Die Sinan Tekija” (The Sinan Tekija; tekke, a convent of the Kaderija dervish order) in Sarajevo’s outskirts [Fig. 2.67]. The convent was in all likelihood constructed by Hadži Sinan, a rich sixteenth-century merchant with imperial connections.¹⁰⁹ Bernt’s image reinterprets Heinrich Renner’s 1896 depiction of the same site from a different angle¹¹⁰ [Fig. 2.68]. Bernt’s depiction of Sarajevo’s Turkish bath makes plain the proximity and intermingling of the city’s Ottoman architecture with its newer Austro-Hungarian structures [Fig. 2.69].

Bernt concludes his descriptive architectural geography of Sarajevo with two such structures, both of which demonstrate that the Austro-Hungarian architects applied an orientalist stylistic idiom to the new civic structures of the Austro-Hungarian Bosnia and Herzegovina. The idiom was exclusively a Neo-Moorish one, which interpreted the

¹⁰⁹ See Sarajevo Vakufska Direkcija, *The Most Important Monuments of Islamic Culture in the Town of Sarajevo* (Sarajevo: Vakufska Direkcija, 1955), 24.

¹¹⁰ See Heinrich Renner, *Durch Bosnien und die Hercegovina Kreuz und Quer* (Berlin: Reimer, 1897), 68.

traditional characteristic of Moorish architecture from Iberia: cusped arches, crenelated rooflines and the striping of stone.¹¹¹ Although it was probably not lost on the Austrian architects that built up Sarajevo, Mostar, Banja Luka and other cities in the wake of occupation that Moorish architecture had no consequential relationship to Ottoman Bosnia, the style was nevertheless deemed sufficient to represent the Ottoman and Muslim contexts, at least in part because it conformed to a stylistic repertoire that, established elsewhere in Europe, had already naturalized elements of Islamic architecture into the greater canon of historicist styles of the day. This would appear to have had the unusual and simultaneous effect of both familiarizing and “othering” Bosnia within the context of Europe, naturalizing them into a notion of multicultural Europe while simultaneously, and anachronistically, linking them to a Jewish community with a largely second class status on the continent.

Among the important architectural images, one is of the “Scharia-Richterschule,” a center for the study of Islamic theology designed by the Czech architect Karel Pařík (1857–1942) and completed in 1887¹¹² [Fig. 2.70]. The second is a more detailed view of Wittek and Iveković’s city hall [Fig. 2.71]. There is but a single image of the railways: a railway bridge crossing the “Ivansattel,” a steep pass in the Dinaric Alps between

¹¹¹ In Europe, the Neo-Moorish style took hold within the wider Romantic movement and flourished in the German-speaking lands in particular. In most instantiations up until about the 1880’s the style was deployed in the construction of synagogues. Later it would also be applied to additional applications, namely industrial facilities such as cigarette factories, cafés and zoos. See Carol Herselle Krinsky, *Synagogues of Europe: Architecture, History, Meaning* (Cambridge, MA: MIT Press, 1985); Stefan Koppelkamm, *Exotische Architekturen im 18. und 19. Jahrhundert* (Berlin: Ernst & Sohn, 1987).

¹¹² An excellent summary of the Austro-Hungarian architects and their influence on the architecture of Bosnia and Herzegovina, including much more information on Karel Pařík, appears in an online paper by Dr. Amir Pašić, “Arhitektura Bosne i Hercegovin Austrougarski Period (1878–1918),” accessed December 13, 2013, http://infiarch.ba/UserFiles/File/Arch_BiH/05%20Arhitektura%20%20BH%201878-1918.pdf.

Sarajevo and Mostar, built with a quintessential German ashlar construction system and, in this case, an inverted steel truss span [Fig. 2.72].

The *Kronprinzenwerk* is a key document of geography beyond its specific documentation of Bosnia and Herzegovina and its railways. At the end of the introductory volume, Crown Prince Rudolf indicated the binding effect he intended the volumes of the study to have—which appears to deliberately gloss over the immense amount of interethnic strife that existed in Bosnia and well beyond:¹¹³ “Let the peoples of these lands love, respect and support each other as they come to learn about each other through this work; let them consider how they may loyally serve the throne and the fatherland.”¹¹⁴

While the volume did not successfully cohere the constituencies of the Austro-Hungarian empire in any lasting way, it did have specific effects in the German-language study of culture and the arts. The volume provided fodder not only for those in the diffusionist school of geography but also, as Matthew Rampley has noted, for those who sought to counter the monolithic Eurocentric-origin myths in the arts established by Alois Riegl (1858–1905) and the Vienna School, turning the Vienna school on its head from its very place of inception.¹¹⁵ This had a particular potency in Bosnia, as it directly linked an Ottoman and Islamic culture to Central and German-speaking Europe, and the railway,

¹¹³ See Matthew Rampley, “Art History and the Politics of Empire: Rethinking the Vienna School,” *The Art Bulletin* 91, no. 4 (December 2008): 449. Another relevant study of the Czech context is Marta Filipová, “Peasants on Display: The Czechoslavic Ethnographic Exhibition of 1895,” *Journal of Design History* 24, no. 1 (2011): 15–36.

¹¹⁴ *Die österreichisch-ungarische Monarchie in Wort und Bild*, vol. I (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 295. See also Rampley, “Art History and the Politics of Empire,” 449.

¹¹⁵ Rampley, “Art History and the Politics of Empire.” Rampley bases this claim primarily on the most important such example, Josef Strzygowski.

like architecture, dress, ceramics, and other forms of material culture, functioned as a visible ligament of that proposal at the end of the nineteenth century.

2.7 Coded Geography: “Vocabulaire Telegraphique”

The key importance of the concept of *Land und Leute* is epitomized and given a certain clandestine touch in a document entitled “Vocabulaire Telegraphique” in the von Pressel archives, which appears to be a set of codes established between the German railway engineers and Ottoman officials for telegraphic communiqués concerning the railways.¹¹⁶ In this document, places that would be commonly referenced (including sections of the railway line, cities in the German and Ottoman empires, etc.) and people (including nonspecific groups or bureaus) were given secret alternative names so that in the event a telegraph was intercepted by a foreign power, it would not be understandable.

Typically, telegraphic codes were meant to shorten longer words into shorter ones to save space and money, which appears to be the case here. The list follows verbatim, with the real terms on the left and the corresponding code terms on the right:

Banque Ottomane	Josephine
Berlin	Hambourg
Bruxelles	Cologne
Chemins de fer d'Anatolie	travail
Haidar Pacha-Ismid	transaction
Ismid-Eskisehir	zetiftlik
Eskisehir-Angora	bois

¹¹⁶ “Vocabulaire Telegraphique,” DM NL 13II/26.

Angora-Diarbakir	laine
financiers Allemandes	Yohn
Alep-Bagdad	lin
financiers Anglais	Muller
financiers Francais	Baptiste
financiers Austrichens	Apostole
Grande Vezir	Auguste
Iradé	souvenir
Ministère des Travaux Publics	Pierre
Ministère de la Guerre	Fernand
Ministère des Finances	Phillipe
Pressel	Jean
Rustem Pacha	Edgar
Sublime Porte	Amélie
Sultan	Joseph
"très bon pour nous"	rouge
Baron Hirsch	André
Bakschisch	papier
Chemin de Fers d'Anatolie	affaire
Deutsche Banque	Arnold
Kilometre	pierre
Francfort	Breslau

It is safe to assume that the coding was, for the most part, not intended as particularly symbolic, although it inevitably reveals a certain mindset and set of associative connections. Most significantly, it reveals the most common entities that were referenced.

The financiers and potential financiers were, for example, delineated by nationality despite the fact that the railways of European Turkey, for which this code was intended, were funded through a multinational structure. The list also reveals the four most important individuals associated with the railway: von Pressel, Hirsch, Rüstem Pasha (Rüstem Pacha), and the Sultan. It reveals the most important locations that were not railway segments: Frankfurt (“Francfort”), the Deutsche Bank headquarters; Berlin, the seat of German political power; and Brussels (“Bruxelles”), the base of Hirsch’s operations at the time. The two most interesting coded phrases, though, are without a doubt “Bakschisch” (*baksheesh* [German], *bahşış* [Turkish]) and “très bon pour nous”. The inclusion of the former testifies to just how common the process of bribery must have been if it needed to be codified in official correspondence. The latter indicates something even more suggestive. The use of “very good for us” implies that the German and Ottoman unit had a perceived adversary on the ground in the early construction of the rail network. This could have been, one can imagine, anything from a stubborn landowner or a felicitous topographic characteristic to an entire minority ethnic group or foreign power (“us” vs. “them”). Few telegrams appear in either German or Turkish archives, and it is thus difficult to generalize as to what exactly was meant by this, but it is fair to assume that its implications are significant and anticipate the railway as a divisive event, be it internally or externally.

2.8 Locomotive Themes and Modern Vistas in the Abdülhamid II Albums

The well-known Abdülhamid II albums, a monumental collection of fifty one albums comprising large format photographs spanning the years 1880-1893 commissioned by Abdülhamid II himself, is also necessary to consider in the context of geography.¹¹⁷ In total, the 1,819 photographs place a primacy on Ottoman modernization, highlighting handsome new educational facilities and alert students, well-equipped army and navy facilities, advanced civic technologies like firefighting equipment, government buildings, factories and industry, and a wide swath of infrastructure like hospitals, port facilities and, of course, railways. The vast majority of the photographs were executed by the state photographers Abdullah Frères (1820-1902), Pascal Sébah (1823-1886), and Policarpe Joaillier (fl. 1880-1900).¹¹⁸

As much as the albums were a document of a new, modern geography by its self-styled modern Sultan, the albums were also, as Mary Roberts has noted, an attempt to eschew the demeaning stereotypes of popular Orientalist photographers working in the

¹¹⁷ The albums are fully digitized and available online at the library of congress's website: LOC Lot 11915. "Abdul Hamid II Collection," Library of Congress, accessed November 6, 2013, <http://www.loc.gov/pictures/collection/ahii/>. There is surprisingly little monographic literature on the albums. Key bibliographic references include: Ali Behdad, "The Orientalist Photograph" in Ali Behdad, Luke Gartlan, eds., *Photography's Orientalism: New Essays on Colonial Representation* (Los Angeles: Getty, 2013), 11-32; Mary Roberts, "The Limits of Circumscription" in Ali Behdad, Luke Gartlan, eds., *Photography's Orientalism: New Essays on Colonial Representation* (Los Angeles: Getty, 2013), 53-74; Muhammad Isa Waley, "Images of the Ottoman Empire: the Photograph Albums Presented by Sultan Abdülhamîd II," *British Library Journal* 17, no. 2 (1991): 111-27; Carney E. S. Gavin, ed., *Imperial Self-Portrait: The Ottoman Empire as Revealed in Sultan Abdul-Hamid II's Photographic Albums* (Cambridge, MA: Harvard University Semitic Museum, 1989).

¹¹⁸ At the time of writing, Ahmet Ersoy was at work on a project on Ottoman photography which will touch on the work of these photographers, a study the author eagerly awaits.

empire, which included several Germans.¹¹⁹ Abdülhamid II himself gave the following directive at the outset of the albums' compilation:

Most of the photographs [taken by European photographers] for sale in Europe vilify and mock Our Well-Protected Domains. It is imperative that the photographs to be taken in this instance do not insult Islamic peoples by showing them in a vulgar and demeaning light.¹²⁰

Demeaning Islamic (or Ottoman) peoples was far easier to do when people themselves were actually depicted in photographs and, as such, it is noteworthy that the images of railway sites are largely devoid of people, despite the fact that hundreds of people were using them on any given day and despite the fact that the sites had a European pedigree. The results are rather an image of architectural portraiture.

The time range of the albums' compilation – 1880 to 1893 – falls in a period where railway development was still nascent. The lines of European Turkey and the line from Haydarpaşa to İzmit had been completed and the technologically more advanced and architecturally more ambitious construction of the Anatolian Railways was either in negotiation or early gestation (having begun construction in 1887). The absence of images of the Anatolian Railways from the albums indicates that the photographs of important railway sites were executed primarily, if not entirely, prior to 1887.

The sole image of Sirkeci station is by Frères and depicts the station not from its ceremonial public façade but rather from the track side where the foregrounding of the rail bed and the steel canopy camouflage the exuberant orientalizing posture of the building. [Fig. 2.73] Similarly, the images of the busy port of Haydarpaşa including the

¹¹⁹ Roberts, "The Limits of Circumscription," 53.

¹²⁰ BOA, Irade Hususi 878/123, 17 Muharrem 1310/12 [August 1892], Yıldız Palace Imperial Secretariat no. 678, as quoted in Deringil, *The Well-Protected Domains*, 156 and Roberts, "The Limits of Circumscription," 53.

jetty with its narrow gauge sleepers for loading and unloading goods [Fig. 2.74], the station (also placed behind a foreground of tracks) [Fig. 2.75] and the railyards [Fig. 2.76] freeze the Haydarpaşa campus in a object-like portrait unpresent from time. These photographs are executed by Ali Rıza Pasha.

Although not part of the railway network per se, the albums also depict the use of rail technology in isolation, particularly how they were utilized in industrial sites, such as at the coke mines and furnaces of Ereğli. [Figs. 2.77-2.78] Little allusion is made to foreign powers, Germany included, throughout the images with the exception of the stately portraits of embassies and consular residences, including the German consular residence at Tarabya. [Fig. 2.79]

The desideratum to portray Ottoman people and Ottoman lands in a way that would eschew the demeaning and/or diminutizing portraits the Sultan saw in European photography is more or less succesful in the Abdülhamid II albums, perhaps at the expense of capturing some of realities of the places and people who had yet to benefit from the major modernization efforts, as in the deep provinces. The images of the railways – as both infrastructural intervention in the geography of the empire and a technological entity – are some of the most succesful exampes of this spirit, achieved through a singular focus on objects, as opposed to people, infrastructure as an object as opposed to a thing to be utilized.

2.9 Theodor Rocholl's Commemorative Anatolian Railway Album of 1908

Another album is a study in contrasts. In 1908, Deutsche Bank and the Anatolian Railway Company commissioned a limited-production album of 28 aquarelles to

commemorate the Anatolian railway and its environs. The album, entitled *Bilder von der Anatolischen Bahn: Den Freunden und Gästen des Unternehmens gewidmet* (Images from the Anatolian Railway: Dedicated to Friends and Guests of the Organization), was executed by the German military artist Theodor Rocholl (1854–1933), and the sole known edition is held in the Deutsche Bank archives.¹²¹ [Fig. 2.80] Rocholl had been employed by the German military as well as independently as an artist of scenes of war since 1877.¹²² It appears that he made his first excursion into the Ottoman empire for a similar album entitled *Theodor Rocholl's Skizzenbuch vom Griechisch-Türkischem Kriegsschauplatz* (Theodor Rocholl's Sketchbook from the Greek-Turkish Theater of War), from the summer of 1897.¹²³

The series of aquarelles traces the landscapes of the Anatolian railways as well as the earlier line connecting İstanbul to İzmit. The album's opening image, "Burgruine bei Gebze am Golf von Jsmid" (Village Ruins at Gebze on the Gulf of İzmit) [Fig. 2.81], depicts a verdant hilltop overlooking the Gulf of İzmit, looking directly south toward the western edge of the Koroğlu mountains, with a hint of snow at the highest peaks. The ruins are probably those of the Greek settlement of Libyssa. A lone horseman can be seen in the near distance. The following image, "Griechisches Mädchen" (Greek Girl) [Fig.

¹²¹ DBHI. Stored as a special holding: Anatolische Eisenbahn-Gesellschaft, *Bilder von der Anatolischen Bahn. Den Freunden und Gästen des Unternehmens gewidmet*, Privatdruck, ca. 1908.

¹²² There is a significant amount of literature on Rocholl. See Helmut Burmeister and Veronika Jäger, *China 1900: Der Boxeraufstand, der Maler Theodor Rocholl und das "alte China"* (Hofgeismar: Verein für hessische Geschichte und Landeskunde e.V., 2000); Silke Köhn, "Theodor Rocholl 1855–1933," *Sammler Journal* (June 2009): 66–75; Theodor Rocholl, *Ein Malerleben: Erinnerungen* (Berlin: Verlag der Täglichen Rundschau, 1921).

¹²³ Theodor Rocholl, *Theodor Rocholl's Skizzenbuch vom Griechisch-Türkischem Kriegsschauplatz, Sommer 1897* (Leipzig: 1897).

2.82], depicts a young girl, probably five or six years old, leaning or sitting against the side of a structure made of wood and stone. Her clasped hands and pursed lips imply a reluctance to engage with the artist, but her knowing and slightly melancholic eyes simultaneously hint at her curiosity about the artist. The next image, “Bahnwärter an der Anatolischen Eisenbahn” (Railway Attendant of the Anatolian Railway) [**Fig. 2.83**], depicts a man in his fifties or sixties in a khaki-colored uniform and fez, looking dutifully at the artist. He carries a baton used for directing railway traffic in his right hand and a bag over his left shoulder. In the background, a railway switch signal can be seen amidst a thicket of trees and vegetation. Although the man is somewhat disheveled and unshaven, his demeanor appears straightforward and trustworthy, conveying a sense of reliability and an assurance that the railway is in capable hands. The attendant is also reminiscent of the figures depicted in Ottoman guides circulated to conducting and technician trainees who stand in a similar position. [**Fig. 2.84**]

The following image, “Bahnstrecke am Golf von Jsmid” (Railway Track Along the Gulf of İzmit) [**Fig. 2.85**], depicts a distant train chugging in a westerly direction along the gulf’s northern shore, where the tracks come spectacularly close to the water’s edge. Here the power lines accompanying the railway’s trace are visible and may be read as part and parcel of the railway’s course through the landscape.

By the next image, “Griechen-Haus” (Greek House) [**Fig. 2.86**], the artist appears to have arrived in İzmit, given the urban context of the house’s siting and its multiple levels and use of projecting units. The house is also unique in several ways, appearing to have a beveled edge that is filled in with an upper loggia connected to street level by a perilous-looking wooden ladder. Although a solid stone foundation can be seen at ground

level, in every other respect the house epitomizes the typical picturesque qualities of the Ottoman home with its ad hoc use of wood and plaster and its roofing. What might distinguish this house as specifically “Greek” (as opposed to “Turkish”) is the lack of exposed timber on the house’s elevations to reveal the building’s structural frame. The following image, “Jsmid” (“İzmit”) [Fig. 2.87], depicts a paved road dropping steeply downhill within the city and affording a view of the gulf beyond the roofs of the houses and beyond. At the street level, one house in the distance appears to span the entire thoroughfare, appearing almost like a bridge. A lone man on the left-hand side is perched against a building, while a lone woman on the right-hand side proceeds downhill. In the immediate foreground, a wrought-iron bracket supports what appears to be a shop sign. Distinctly European, the bracket connotes a touch of modern European influence in an otherwise prototypically “timeless” Ottoman urban scenscape.

The next image, “Tscherkessen-Mädchen” (“Circassian Girl”) [Fig. 2.88], depicts a fair young girl who, like her Greek counterpart, appears to be around five or six years old. Here the artist’s emphasis is on the girl’s ornate clothing. A number of large and decorative clasps flanked by decorative metal pendants adorn her red gown, and a fabric belt with chains attached to its buckle along with an armband further articulate a certain regal quality to the girl’s appearance. Her eyes are blue and her hair is blond, and it is not inconceivable that the artist chose this girl for her exceptionally Northern European appearance. Her head is, nonetheless, covered in a white shawl, a typical custom in Circassian culture, denoting her status as nonetheless exotic. The following image, “Karasu-Schlucht,” a canyon of the Karasu River [Fig. 2.89], takes the viewer into the heart of Anatolia. Here the artist, in a quasi-surrealist departure from the format of the

other images, depicts the deep gorge setting of the railway with a sense of drama. The railway tracks bend fluidly around a rocky passage as a train, sputtering smoke, rounds a bend. To the right of that, the artist depicts a swiftly flowing river whose water appears to be moving toward the artist at a speed comparable to that of the locomotive. High above, the sun illuminates the mountain face as two birds circulate through the sunny sky above the darker environment below.

This landscape is followed by another portrait, “Landmann [sic] in Biledjik” (Fellow in Bilecik) [Fig. 2.90]. The man is depicted in profile without a backdrop. His arms, folded behind his back, structure his confident posture, and his colorful, almost glamorous clothing lend him the air of a flaneur. The next image, “Pflügender Bauer in Anatolien” (Plow Farmer in Anatolia) [Fig. 2.91], depicts a man in a very different mode. This man, significantly older and perhaps less regal than the previous one, is eclipsed by two cows ahead of him who assist his tilling of the earth. In the following image, “Meerschaum-Händler” (Meerschaum [Sea Foam] Dealer) [Fig. 2.92], we are introduced to a man at the heart of the local economy around Lake Beyşehir: sea foam. Meerschaum, the mineral used to fashion high-quality smoking pipes, was cultivated from the shores of the lake where it originated. Squinting and looking somewhat strained, the man, who appears to be in his eighties or nineties, may be blind or near blind—a supposition reinforced by the subtle depiction of a cane in his right hand. His left wrist is bedecked with prayer beads, and two satchels, one resting on the front of his torso and one on his back, are presumably filled with his trade goods. This image is followed by another, “Wagenführer in Eskischehir [sic]” (Wagon Driver in Eskişehir) [Fig. 2.93], that depicts an aged man standing dutifully beside his horse, and the horse’s festive and colorful head

ornamentation take center stage in the image. In the subsequent image, “Bearbeitung von Meerschaum in Eskischehir” (Production of Sea Foam in Eskişehir) [Fig. 2.94], the viewer is given a glimpse behind the scenes into the production of the special product. Nine men can be seen in the image: seven of them are either seated or on their knees working intensively with the material, while the other two men in the background appear to be overseeing their work. The image is evocative in many respects. Most notably, it depicts an unusual moment of handicraft as the province of men, not the women with whom these types of scenes were more commonly associated. The work environment is relaxed and convivial, unlike a factory setting, and one can imagine these men sharing stories and jokes with one another while their hands keep busy. A postcard [Fig. 2.95] from the same area evokes a similar scene but with supervisors dressed in European clothes and a slightly more crowded, less casual environment.

Moving from the workshop to the field, the next image, “Ackerbauer aus der Umgegend [sic] von Eskischehir [sic]” (Farmer from around Eskişehir) [Fig. 2.96], introduces the viewer to a prototypical farmer: well-worn with deep wrinkles and a stoic disposition, not dissimilar to the man depicted in the following image, “Meerschaumverkäufer in Eskischehir [sic]” (Sea Foam Salesman in Eskişehir) [Fig. 2.97].

The artist then proceeds to Afyonkarahisar (Afiun-Karahissar) [Fig. 2.98]. Central to the image, as in virtually all images of that city, is the dramatic outcropping that dwarfs the city’s demure skyline and provides a home for its medieval citadel. In the foreground of the image is the city’s central marketplace and mosque. The city’s bustling commercial life is evinced through the depiction of countless figures moving to and fro as

well as carts, cattle, and large sacks of goods. This urban depiction is followed by “Auf dem Wege nach Beyschehir [sic]” (On the Way to Beyşehir) [Fig. 2.99], a rural depiction of a road and two stopped wagons, a handful of people, and horses. Once in Beyşehir (Beyschehir) [Fig. 2.100], the artist draws the viewer’s attention to the ruins of the summer residence of the Seljuk Sultan Kaykubad I (r. 1220–1237). In the next image, “Tür zum Grabe des Sulejman bin Eschref in Beyschehir” (Door to the Grave of Suleyman bin Eshref in Beyşehir) [Fig. 2.101], Rocholl hones in on a detail of a grave: its elaborately carved door and the epigraphy in its upper portion. Within the Suleymaniye Mosque of Beyşehir (“Sulejmanie-Moschee in Beyschehir”) [Fig. 2.102], the artist gives the viewer an intimate portrait of the focal point of the mosque’s interior: its qibla and minbar. The qibla, adorned with muqarnas and a green-blue color scheme, is flanked by a band of epigraphy. The minbar, with its elaborate wood carving, is a visual counterpoint to the niche. The elements are united by the rich colorful topos of small variegated carpets, a typical arrangement for smaller regional mosques.

The artist returns to landscape in the following image, “Auf dem See von Beyschehir” (On Lake Beyşehir) [Fig. 2.103]. Having seen so much sea foam by this point, it seems safe to assume that the five men depicted in the sailboat are out on the lake to collect the prized product. After moving through another rural landscape, “Kara-Agatsch” (Karaağaç, Bilecik province) [Fig. 2.104], the viewer is greeted by a railway worker in Diliskelesi (“Bahnarbeiter in Dil-Jskelessi”) [Fig. 2.105]. Unlike the earlier railway employee near Gebze, this worker, who is likely in his thirties, is not wearing a uniform, nor are there any indications of his presence within an actual railway environment. Rather, his portrait appears to have a purely ethnographic purpose in which

his mustache, high-cropped jacket, and colorful yellow headgear combine to depict a simple yet alert man ready for work.

The artist continues through a set of three distinct landscape depictions, all just north of Konya. The first image, of Kızılviran [Fig. 2.106], depicts a quintessential small village with its crooked streets and improvised balconies. In the next village [Fig. 2.107], Permata, the viewer is introduced to the central role of the river, where a woman and her small child are either collecting water or doing the wash. Next, “Alte Brücke bei Karahissar” (Old Bridge at Karahisar) [Fig. 2.108] offers the viewer another river scene, this one with a ruined Roman bridge. Three men, one directly in the foreground of the image, appear unfazed by the antique site as they either lounge on it or go about their work nearby. The album closes with two portraits, both of Circassian males from Konya. The first, “Tscherkessenknabe in Konia” (Circassian Boy in Konya) [Fig. 2.109], depicts a boy about seven or eight years old whose puckered lips, rosy cheeks, and knowing eyes hint at a coy smile. The second image, “Tscherkesse in Konia” (Circassian in Konya) [Fig. 2.110], depicts a grown man about forty years old whose tall wool hat, long black robe, and purple tunic lend him an air of importance. His arms, poised graciously behind his back, and his faint sideways smile give him an air of benevolence and a kindness that is belied by the massive sheathed knife tucked into his waistband.

Seen together, the images of Theodor Rocholl’s commemorative album offer new insight into the specifically picturesque as well as ethnographic qualities with which the railway was perceived, even by its very own managers who commissioned the album to commemorate the line. Despite the album’s proximity to the cradle of Turkish culture, the focus is not on the Mevlevi dervishes, as one might expect, but rather on the “exotic”

Circassians, unique Greeks and the local crafts. The images, conceived as portraits more than individualized types, imbues the ethnographic images with a simultaneous sense of touristic whimsy. The visual content of the album falls into roughly three categories: portraits, landscapes, and the chronicling of everyday life. In the category of portraits there is a selection of subjects who are either very young children or older men. This is noteworthy in two respects. First, it leaves out virtually any trace of a person between the ages of eight and fifty, the bulk of human life and the apex, normally, of its productivity. This seems to reinforce the timeless qualities of the proverbial “Orient,” which is either puerile and impish or past its prime. The fact that no adult women are portrayed is also noteworthy, suggesting not only that women would not pose for the portraits but also that they were by no means to be gazed upon. In some ways, this moves beyond the nineteenth-century exoticization of “Oriental” women who were typically pictured in the harem as objects of sexual fantasy and is a propos of the album’s late orientalist context.

The landscapes, divided between those that depict the railway in the landscape, those that depict urban or village scenes, and those that depict the countryside, alternate between rather prototypical picturesque *mise-en-scènes* of the slow life that could just as well be somewhere in Bavaria or Britain and landscapes that emphasize the novelty and heroicism of the railway penetrating a virgin and exotic land. The remaining images, depicting men at work, heroicize simple labor—farming, salesmanship, crafts, etc.—and memorialize a land that, despite all of the recent railway development and industrial development, is largely agrarian and remains, in crude yet blissful simplicity, timeless.

2.10 The Philipp Holzmann Album of 1914

An unattributed album in the Philipp Holzmann archives, prepared between the summer and the early winter of 1914, comprises almost 200 small- and medium-format photographs pasted one to four per page on grey board and bound into a single volume. The locations of the photographs gradually move westward from the Baghdad Railway line's projected terminus at Basra all the way to the major base camp at Belededik in the Taurus Mountains. The photographer appears to be the same throughout the album, given the similarity of both the camera quality and the amateur but astutely photographed frames selected. In all likelihood, the photographer was an administrator, not an engineer, as the photographs hardly ever focus on technical or construction feats, and the audience for the album was most certainly internal, as suggested by the casual placement of both the images and their captions, which are typed on hastily cut and glued scraps of white paper.

The photographs capture an array of themes that are juxtaposed in unexpected ways. The variety of the themes on the eve and the early days of the Great War as well as their juxtapositions demonstrate that the railway was considered by its lead engineering firm, at least internally, as something like the engineering equivalent of a *Gesamtkunstwerk*, conflating documentary, ethnographic, procedural, archaeological, architectural, and scientific information into a single cultural-geographical compendium with distinct colonial undertones and actualized by the Baghdad Railway's construction. A selection of seventeen pages will serve to provide a comprehensive overall impression of the album.

The first of these pages [**Fig. 2.111**] contains two photographs, both of Basra and both depicting the city's main canal, a branch of the Tigris, and its slow-paced commercial bustle. The next page [**Fig. 2.112**] depicts another tributary of the canal and the city's main frontage on the river, marked by a single wooden bridge and (according to the caption) the Russian consulate. The next selected page [**Fig. 2.113**] brings the viewer to Baghdad, where the photographer presents two images, one depicting the main landing area for the ships traveling between Baghdad and Basra and another showing the city's famous pontoon bridge. On another page documenting Baghdad [**Fig. 2.114**], an image of Bedouin women delivering yogurt to market is juxtaposed with the "Palais Kazım-Pascha" (Palace of Kazım Pasha), a stately Ottoman villa set directly against the riverbank wall, which (the caption notes) has been converted into the headquarters for the Baghdad Railway Company. The following page [**Fig. 2.115**] continues along the river and shows yet another Russian consulate, a simple block of a building that contrasts with the stately Neo-Renaissance British consulate below it. Another page [**Fig. 2.116**] pictures "Serail-Strasse" (Palace Street) directly adjacent to the bustling bazaar deep within Baghdad's inner city, where a number of men and women can be seen going about their daily activities.

Another page [**Fig. 2.117**] depicts two quintessential orientalist tableaux from two markedly different vantage points. The upper image depicts several men with photography equipment taking pictures of four local men who stand along the riverbank with the river itself as their backdrop. The caption notes the location as "Kissik" at kilometer 1251 and identifies the photographers as the study brigade of the Baghdad Railway for the unfinished line between Tell Halaf and Mosul. The image directly below

this depicts four women sitting outside against two ornate iron grills and kneading bread. Below that, the photographer captures an impromptu scene at an Arab tent camp.

Proceeding westward, the photographer arrives in the area around the city of Bahçe where the boring of a massive tunnel is underway [Fig. 2.118]. The photographer makes special note of the headquarters of the *Gendarmerie*, the Ottoman police force charged with keeping law and order on the work sites. A final selected image [Fig. 2.119] depicts the environs of Beledik, then the new center of railway activity in the Taurus Mountains. Alongside the images of workers' barracks are two others: one of the ruins of a circular fortification from the days of the Crusaders and another of the city of Adana covered in snow.

2.11 The “Héré-Déré” Album of Maschinenfabrik Augsburg-Nürnberg A.G.

An album in the Holzmann archive entitled *Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie: Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A. G. / Werk Gustavsburg* (Viaduct over the Héré-Déré Gorge for the Baghdad Railway: Design and Installation of the Steel Structure by the Maschinenfabrik Augsburg-Nürnberg A. G. / Gustavsburg) [Fig. 2.120] begins in July 1914 and documents the construction of a single iron bridge.¹²⁴ The album appears to have been created by a Holzmann subcontractor, the Bavarian-based producers of iron and machines Maschinenfabrik Augsburg-Nürnberg A. G. The album comprises

¹²⁴ This section of the Baghdad Railway was overseen by the engineer Friedrich Mielke and accounts from his journals recount the company's first visits to the site along with a series of other revealing aspects of the building stages of both the viaduct and a handful of kilometers on either side of it. See Heigl, *Schotter für die Wüste*, 101-9.

thirty-two photographs, each pasted centrally on a single landscape-format page of green construction paper without captions. This is a baby album for the bridge's fruition, documenting its earliest stages through its completion and suggesting the human excitement behind the execution of a challenging engineering project. A selection of pages reveals key moments.

A first image shows the untouched landscape [Fig. 2.121], while another depicts the basic shelters built by the engineers for the duration of their stay on the site for the construction [Fig. 2.122]. An image from early 1915 shows the light iron structure gradually extending over the gorge below, touching down on two ashlar footings [Fig. 2.123]. A subsequent image, drawing in a bit closer, shows a handful of workers on a dolly that is perilously rolled out toward the extension's edge, lowering a beam into place, while other images [Figs. 2.124–2.126] provide details of the mutually reinforcing footings. Another image taken from the gorge bed presents the progress of the construction in the spring of 1915 with a quasi-constructivist dramatic flair [Fig. 2.127], while yet another illustrates the beginning of the construction from the opposite side [Fig. 2.128]. An image from April 1915 depicts a group of six workers, men who appear to be in their twenties and thirties, atop the bridge in the midst of construction [Fig. 2.129]. At least one of the men is dressed in European garb. A detail of a welded joint in a subsequent image appears to praise the engineers' craftsmanship [Fig. 2.130]. From the gorge bed, the progress of the second side proceeds quickly [Fig. 2.131], and only three weeks later just a single segment of the bridge remains to be completed [Figs. 2.132–2.133]. Two months after that, the segment is finished and the workers can be seen ceremoniously navigating a large festooned dolly from one side of the gorge to the other

[Fig. 2.134], only to be followed by the passage of the first locomotive in August 1915 [Fig. 2.135]. The engineers and the Ottoman workers spare no opportunity to pose in front of the bridge, proudly asserting the triumph of their technology over the railway's difficult geography [Fig. 2.136].

2.12 The Karl Staudinger Albums

A fascinating album of photographs, many of which focus on railway construction and operations during World War I, is held by the Bayerisches Kriegsarchiv in Munich. The photographs in the album were collected as geographic and sociological documentation for the imperial War Office by the officer Karl Staudinger (1848-1925).¹²⁵ One page [Fig. 2.137] documents the successful agricultural activities on the newly irrigated Konya Plain as well as a spot in the Taurus Mountains which may very well mark the exact point of a monument built for fallen German soldiers (see Chapter Five). Another page [Fig. 2.138] juxtaposes soldier accommodations on the southern front with

¹²⁵ Bka Bildsammlung Staudinger. Some biographical notes on Staudinger appear in the online portal of the Neue Deutsche Biographie: <http://www.deutsche-biographie.de/sfz125641.html>, accessed February 23, 2014. It is possible that the Karl Staudinger in question is the father of the painter and graphic artist, also named Karl Staudinger (1874-1962) who also served in Turkey in World War I. Indeed, it is possible that the album, given the fact that it consisted of photographs, a medium that was used by the younger Staudinger in his own work, was in fact made by him and filed with the records of the older Staudinger. Some biographical notes on the younger Staudinger appear in his official entry in the Deutsche Nationalbibliothek, <http://d-nb.info/gnd/117223425/about/html>, accessed February 23, 2014. In addition to authoring the book (with Anton Hoffman) *Der Deutsche Soldat mit Waffe und Werkzeug* [The German Soldier with Weapon and Tool] (Straubing: Cl. Attenkofer'sche Verlagsbuch, 1910), Staudinger collaborated as the graphic artist on a number of books with focuses on the Near East including Karl May's *Durchs wilde Kurdistan* (Radebeul: Karl-May-Verlag, 1930) and Emil Fischer's *Peke-Wotaw: Ein Deutscher Junge unter Indianern* (Stuttgart: Verlag Franckh, 1940). A compilation of the younger Staudinger's work is held at the Frick Collection in New York, OCLC #855212871.

the construction of a station in the Taurus Range. Another image [Fig. 2.139] proudly presents the monuments of German Jerusalem – the German hospital and the Auguste-Viktoria-Stiftung. Further south, a page [Fig. 2.140] from the Hejaz Railway shows the collection of timber at a Hejaz Railway station, packed onto the backs of camels and presumably transported elsewhere where it may have been used for construction purposes. Another page [Fig. 2.141] depicts a station in Lebabon as well as Turkish soldiers packed into sleeper cars on the Hejaz Railway on their way to being deployed to battle.

2.13 The Philipp Holzmann Photo Collection

The Philipp Holzmann archives also contain a number of loose photographs taken by engineers or other employees while on assignment, including many from the Baghdad Railway, particularly from the difficult Taurus Range area and Adana.¹²⁶ The photographs are not systematic and do not focus on specific themes but do offer insight into the process of construction and documentation from the purview of the engineer.

Several photographs document challenging feats of engineering including the boring of tunnels [Fig. 2.142], the pristine completion of a culvert [Fig. 2.143], and bridge construction [Fig. 2.144]. Some photographs, such as a proud portrait of Adana station shortly after its completion [Fig. 2.145] stand in stark contrast to other images where accomplishments, such as a small tunnel in the Taurus Range, are shown in their brute splendor with the rock they have successfully dislodged [Fig. 2.146]. A formal portrait of Meißner with several Turkish and German workers in crisp white uniforms

¹²⁶ The images are held at the Fachhochschule Potsdam (FhsP).

shows engineers in an unusually formal moment where distinctions between nationality seem largely unimportant. [Fig. 2.147]

In some cases, the photographers are known and many photographs are taken by a certain engineer by the name of Ochs. In two images depicting bridge construction in the Taurus Range [Figs. 2.148-2.149], Ochs captures the critical use of wood in the creation of formwork for the ashlar construction system. In the mountainous range north of Adana Ochs captures scenes of cotton production interspersed with images of the stations in the area, which, minus the clothing, evoke a picture of life in a rural mill town in Germany [Figs. 2.150-2.152]. South of that region, Ochs documents the change in the architectural appearance of the station buildings [Fig. 2.153] while also capturing an image of the newly created German school within the center of Adana [Fig. 2.154]. A number of vignettes, such as an image of a workers' tent camp [Fig. 2.155], raw cotton processing in Adana [Fig. 2.156], and German engineers and their families in formal attire [Fig. 2.57] depict scenes of everyday life along the railway. Och's portrait of the rail landscape at Adana [Fig. 2.58] also stresses the typological variations in architectural style that other photographers document elsewhere, as in Jerablus [Fig. 2.59] (see more on this in Chapter 5).

2.14 Conclusion: Tracts, Tracks, and German Geography

Seen together, the tracts and albums produced around and along with the German construction of the Ottoman rail network offer insights into the essential assimilation of text and image in the creation of a geographic body of knowledge, or at least a corpus of

information purporting to be one. Textual and visual sources, ranging from a wide array of albums and travelogues and geographic studies in multiple languages to periodicals and newspapers such as *Servet-i Fünun* and the *Vossische Zeitung*, testify in words to the common and often inseparable roles of geographic descriptions and political and cultural agendas. When these are studied alongside visual materials such as the Rocholl and Héré-Déré albums and the elaborate plates of the *Kronprinzenwerk*, it is also possible to assess how these written works relied on artistic interpretation, a useful tool for expanding the geographic substrate of the German construction of the Ottoman railway network to an ever wider audience, well beyond the earth where the track was laid.

In this sense, the German geographic exegeses and private albums alike depicting the Ottoman empire c. 1870-1919 had some similar objectives to the French and British models exemplified by the *Description de L'Égypte* and the *Grammar of Ornament* insofar as they interlinked image-making with descriptive, positivist information. But the differences outnumber the similarities. The corpus of German geographic knowledge of the areas of and around the railways, which must also necessarily factor in the concomitant Ottoman studies of its own “outback,” is markedly more parceled, multimedia and less systematic. This echoes the improvisational and phenomenological thread of German geographic knowledge acquisition initiated by Humboldt and later personified by the methodological approach of Ratzel, which placed its emphasis on the process of subjective experience and the gradual, diffusionist transformation of form between space and time over one of absolute imagery with its subtext of essentialized authority.

CHAPTER 3: TOPOGRAPHY

Every physical topography contains a moral and political one.¹

—Joana Stalnaker

3.1 From Terra Incognita to Terra Firma

The study of topography prior to the twentieth century was markedly different than it is today. As alluded to by Wiegand in his pamphlet for the engineers of the Baghdad Railway, the formation of topographic knowledge was primarily a matter of locating places in space, decoding toponyms, and knowing the distances and optimal travel routes between locations. Topography as it is known today is more akin to what was known in the nineteenth century as geomorphometry, or the precise identification of the variation of the surface of the earth in its relationship to Cartesian and cardinal space. This chapter refers primarily to the historical definition of topography but also attempts to understand how both the desire for and the rise of geomorphometry interloped with topography writ large.

The rise of topography and its study is typically characterized as a phenomenon born of enlightenment values that transformed countless uncharted lands around the world from terra incognita to terra firma.² If one pauses, however, and maintains

¹ Excerpted from Joana Stalnaker, *The Unfinished Enlightenment: Description in the Age of the Encyclopedia* (Ithaca, NY: Cornell University Press, 2010), 176. Stalnaker is referring to the philosophy of the French writer Louis-Sébastien Mercier and his thinking behind his descriptive writing about Paris.

² This is evident in the works of Mercier as well as Voltaire, Edward Gibbon, and Goethe. Steven Turner coined the term “enlightenment topography” to connote a mode of knowledge that is “precariously situated between a prejudiced nationalism and a nostalgic primitivism.” See Steven Turner, “Enlightenment Topographies: Scotland, Switzerland, the South Seas,” *The Eighteenth Century* 38 (1997), 238. See also David Bates, “Idols and Insight: An Enlightenment Topography of Knowledge,” *Representations* 73 (Winter, 2001): 1–23.

topography's essential definition as the identification of historic and known places and their interrelationships, Islamicate conventions offer a number of instructive references for broadening the definition and the epistemic milieu of topography. The medieval builders of many pre-Ottoman Islamic cities were, despite a limited knowledge of global geography, not unaware of their location in a networked topographic landscape. One need not look further than the Holy City, Jerusalem, itself to notice the georelational system furnished by the named gates penetrating the city's fortifications—Aleppo, Jaffa, Damascus—allowing travelers and tradesmen to come and go and to understand their location within a network of other cities, other gates, and other roads before even setting foot outside of the city itself³ [Fig. 3.1].

This chapter probes a series of key events in the German formation of topographic knowledge about the Ottoman empire leading up to and serving in its construction of the Ottoman railway network, bearing in mind the broader epistemological milieus of German geography in the long nineteenth century, the focus of the previous chapter, and the analogous forms of Ottoman topographic knowledge with which it came into contact and which, to a large degree, it reproduced through technology. There are two primary lenses in the historical record for examining the production of this topographic knowledge. There is, of course, the crucial entity of the map, which not only documents the production of topographic knowledge but can also, through careful formal analysis in its own terms, generate new knowledge. The second major lens is the event known in the broadest sense as the “expedition.” In the eighteenth century, German-led or sponsored

³ The issue of gates and topography is explored in the context of Jerusalem in Yoram Tsafrir, “Muqaddasi's Gates of Jerusalem—A New Identification Based on Byzantine Sources,” *Israel Exploration Journal* 27, no. 2/3 (1977): 152–61.

expeditions of Anatolia, Rumelia, Arabia, and Mesopotamia generated bodies of knowledge that this dissertation proposes were foundational for the eventual topographic research for the railways' traces. Later, the expeditions of the engineers, architects, and financiers of the railways produced a utilitarian body of knowledge that intimated functions and causes beyond the railway project itself. It remains uncertain to what degree this excess knowledge and the care the expeditions took in creating it were colonial, *wissenschaftlich*, or something in between. The difference, if there even is one, is not the object of this chapter. Rather, the goal of this chapter is to set forth the evidence historically and comparatively and to consider the ways in which the production of topographic knowledge informed the German construction of the Ottoman railway network and developed discretely as a form of dominance through both the entity of the map and the act of the expedition.

3.2 Topographies in Context

Knowledge of the topography of Anatolia, Mesopotamia, and Arabia had little practical use or value prior to the German construction of the Ottoman railway network, but German geography and exploration in the eighteenth and nineteenth centuries had nonetheless consistently been the most significant of any European nation.⁴ The German

⁴ French and British topographic and geographic knowledge of the Levant may be an exception. Parties representing both empires endeavored to produce important studies of the geography and topography of the Levant, chronicled its toponyms, and described its physical landscape. A contemporary summary of British sources can be found in F. W. Hasluck, "Notes on Manuscripts in the British Museum Relating to Levant Geography and Travel," *The Annual of the British School at Athens* 12 (1905/1906): 196–215. See also Michael J. Heffernan, "A State of Scholarship: The Political Geography of French International Science during the Nineteenth

stronghold on the production of topographic knowledge about Arabia, Mesopotamia, and Anatolia has origins in the work of Johann Bernhard Fischer von Erlach's 1725 masterwork *Entwurff einer historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (A Plan of Civil and Historical Architecture in the Representation of the Most Noted Buildings of Foreign Nations, both Ancient and Modern: Taken from the Most Approv'd [sic] Historians, Original Medals, Remarkable Ruins and Curious and Authentick [sic] Designs).⁵ The architect-cum-theorist von Erlach presents 128 pages (88 of which are spectacularly illustrated) of what is ostensibly a history of world architecture but is in reality a compendium of lithographs of monuments, both extant and no longer standing, that von Erlach personally found interesting. Von Erlach's architectural voyage is first mapped [**Fig. 3.2**] and then moves roughly west from Europe and east to China in a series of five books that include a considerable number of sites that would later punctuate the Ottoman railway network, including Solomon's Temple in Jerusalem [**Fig. 3.3**], the Hanging Gardens of Babylon [**Fig. 3.4**], ancient Nineveh [**Fig. 3.5**], the Sultan Ahmed Mosque in Constantinople [**Fig. 3.6**], the Selimiye Mosque in Edirne [**Fig. 3.7**], the Basilica Cistern [**Fig. 3.8**], the Hagia Sophia [**Fig. 3.9**], the Kaaba at Mecca [**Fig.**

Century," *Transactions of the Institute of British Geographers*, New Series 19, no. 1 (1994): 21–45.

⁵ Johann Bernhard Fischer von Erlach, *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725). The volume was translated into English by Thomas Lediard in 1737 as something slightly different than the English translation cited above: *A Plan of Civil and Historical Architecture, in the Representation of the Most Noted Buildings of Foreign Nations, Both Ancient and Modern: ... Display'd in Eighty-six Double Folio-plates, Finely Engraven ... Divided into Five Books*. (London, 1737).

3.10], and additional sites of Ottoman architecture including the imperial baths of Buda [**Fig. 3.11**] and the mosques of Bursa and Buda [**Fig. 3.12**]. The volume is considered important on a number of levels, most significantly in its awakening effect for Germanophone interest in the Near East as an increasingly worthy alternative for philological study.

The paradigmatic work, however, is that of Carsten Niebuhr (1733–1815), who traveled across the region between Egypt, Arabia, and Syria.⁶ His travels and the maps produced to illustrate them have not previously been considered as part of a greater body of German topographic knowledge about the Ottoman empire, despite the fact that Niebuhr's travels marked a course with significant similarities to the eventual course of the railways a century later. This is not to suggest that Niebuhr's study and the maps it produced unilaterally informed the railway planners. To some degree, the route makes logical sense in its general correspondence with population centers, agricultural areas, etc. But what can be argued is that Niebuhr's widely circulated travels sparked a certain sense of authority and familiarity that gelled over the course of the next few generations. Moreover, it is relevant to note that many of the cities that he focuses on—Istanbul [**Fig. 3.13**], Konya and Adana [**Fig. 3.14**], Damascus and Şanlıurfa [**Fig. 3.15**], Mosul [**Fig. 3.16**], Baghdad [**Fig. 3.17**], Basra [**Fig. 3.18**], and even Afyonkarahisar [**Fig. 3.19**]—would become important stops along the Baghdad and Anatolian Railways, in particular. These cities are, as they were for Niebuhr, part of a networked sequence of locations marking the transition from the edge of Europe to the Indian Ocean.

⁶ See a series of incisive critical considerations of Niebuhr in Josef Wiesehöfer and Stephan Conermann (eds.), *Carsten Niebuhr (1733–1815) und seine Zeit* (Stuttgart: Franz Steiner, 2002).

The frequency of the German mapping of Anatolia and Arabia accelerated in the nineteenth century, and the maps became more detailed, in terms of both their topographic information and the information they provided about several of the same cities. Noteworthy are Fischer's maps for Karl Friedrich Ludwig von Vincke's 1854 (executed 1838) *Planatlas von Kleinasien*, which also depict Konya [Fig. 3.20], Afyonkarahisar [Fig. 3.21], Kütahya [Fig. 3.22], and Karaman [Fig. 3.23].⁷ Fischer mapped Ankara [Fig. 3.24] a year later, notating the map in Ottoman as well as German.

By the late nineteenth and early twentieth centuries, German mapping techniques of its colonies and spheres of influence became increasingly experimental and the sections that follow trace these developments as they evolved through the construction of the Ottoman railways.

Before doing so, a late example, from German East Africa (now Tanzania) in 1915, is germane to the story of this evolution as a heuristic of how native peoples, be they African or Ottoman, came to be seen as more than mere people settled in a field of Cartesian, topographic space which rail could or would penetrate. In 1915 Weule⁸ published a set of highly experimental maps relating to the railways of German East

⁷ Karl Friedrich Ludwig von Vincke, *Planatlas von Kleinasien: Aufgenommen und gezeichnet in den Jahren 1838–39* (Berlin: Schropp, 1854).

⁸ Weule's key publications include *Negerleben in Ostafrika* (Leipzig: F.A. Brockhaus, 1908); *Die Kultur der Kulturlosen* (Stuttgart: Kosmos, 1910); *Kulturelemente der Menschheit* (Stuttgart: Kosmos, 1910); *Leitfaden der Völkerkunde* (Leipzig; Vienna: Bibliographisches Institut, 1912); *Die Urgesellschaft und ihre Lebensfürsorge* (Stuttgart: Kosmos, 1912); *Vom Kerbstock zum Alphabet. Urformen der Schrift* (Stuttgart: Kosmos, 1915); *Der Krieg in den Tiefen der Menschheit* (Stuttgart: Franckh, 1916). Biographical notes appear in Bergit Korschan-Kuhle, "Weule, Karl," in Horst-Rüdiger Jarck, Günter Scheel, eds., *Braunschweigisches biographisches Lexikon – 19. und 20. Jahrhundert* (Hannover: Hahnsche Buchhandlung, 1996), 650–51.

Africa in the geographic journal *Petermann's geographische Mitteilungen*.⁹ The maps comprise five separate maps on two sheets. The first sheet [**Fig. 3.25**] is a composite of three maps: 1) “Schiffsweg Daressalam-Lindi” (sea route between Dar es Salaam and Lindi) with a certain “Pesa Mbili” noted as the illustrator, 2) “Große Karawanenstraße Daressalam-Tabora” (great caravan route between Dar es Salaam and Tabora) with a certain “Sabatele” noted as the illustrator and 3) “Die Inselbergreihe von Massassi” (the island mountain range of Masasi) with a certain “Salim Matola” noted as the illustrator. The first and second maps contain an underdrawing of the Tanzanian-Zanzibarian littoral and the Dar es Salaam-Tabora road respectively, marked in red with only the most essential information (names of villages) outlined. Over these drawings, Mbili and Sabatele, having “primitive” topographic knowledge unseeable to the German colonists, appear to have been asked to draw things from memory. The drawings are patently “primitive,” out of scale, explicitly psychorelational and subsequently annotated by Weule. In the first map, this includes a diagram of Mbili’s own house in Lindi, replete with windows and steps and the subsequent stops he must make on his ritualistic pilgrimages to Dar es Salaam, which is marked with crude drawings of its port, the government building and the German imperial flagpole. The islands on the route are drawn as crude circles in between the two points. In the second map, Sabatele depicts the caravan route between Tabora and Dar es Salaam as a network of organic pod-like forms, each pod appearing to represent a settled population. In the third map, which has no underdrawing, Matola depicts, in elevation rather than plan, an outcropping of rocks and

⁹ Karl Weule, “Zur Kartographie der Ostafrikaner” (Regarding the cartography of East Africans), parts I and II, from *Petermanns Mitteilungen*, 1906. SPG Geogr 4° 00022/01 (61). SPG.

ragged trees. Perched on the leftmost rock is what appears to be a man holding a rifle, perhaps a colonist, seemingly poised to shoot it.

The second sheet [**Fig. 3.26**] is a composite of the fourth and fifth maps: 4) “Karte von Deutsch-Ostafrika” (map of German East Africa) with Pesa Mbili as its illustrator and 5) “Route Lindi-Massassi” (route between Lindi and Masasi) with Mbili again listed as illustrator. In the fourth map, which also has no underdrawing, Mbili charts the entirety of German East Africa as a series of pods, similar to those in the second map. The pods, which appear to represent villages, occasionally have shading or striping and are interconnected by a roughly square line with branches. The scale varies widely with the flagpole, known from the first map, again appearing as larger than many entire villages. In the fifth drawing, which has a simple red underdrawing of the road connecting Lindi and Masasi, Mbili gives hints as to the rationale behind the shading of the clusters. Clusters without shading are annotated by Weule as stone houses (noted singularly as “Steinhaus”) while hatched clusters are noted as huts (noted singularly as “Hütte”), indicating Mbili’s graphic techniques as one primarily defined by architectural composition, albeit abstracted in plan. In Lindi another flagpole is a prominent object, appearing to be the only object in the map that is not a residence.

Weule, even more than Ratzel, is known as a geographer complicit in the German colonial project and his maps, through their mere exhibition of “native” topographies do not in and of themselves connote a desire to celebrate the topographic knowledge of the colonial subjects of German East Africa. And while their value in this context seems to be one primarily of aesthetics, they also reveal the impulse of German geographers to understand their subjects from the inside out, through the mapping of a mental topos. The

drawings are, naturally, in and of themselves revealing, particularly the elemental difference found by the natives in architecture – the stone houses, possibly being the domiciles of the colonizers, the huts in all likelihood the domicile of the natives. The recurring theme of the flagpole is also extremely significant, reinforcing the spatial and material binary of the houses in its solitary and prominent signification of German dominion. Weule's mapping project is, consequently, a critical document through which one may retrospectively perceive similarities and differences in the maps produced for the construction of the Ottoman railway and gauge its relationship to the German colonial project as it would be manifest at the time the railways came to their full fruition. There are, to be sure, more differences than similarities but the similarities will speak to the afterlife of Ratzel's diffusionist concept where the documentation of geographic space necessarily had to become a topographic project based on more than just topographic contours but also the visualization of how objects mutated in form as they proceeded through choreographed spatial routes.

3.3 The Wilhelm von Pressel Folios and Study

The crux of this analysis hinges on a set of drawings by Wilhelm von Pressel. The Wilhelm von Pressel archives are held jointly by the Deutsches Museum in Munich and the Österreichisches Staatsarchiv in Vienna. The files with von Pressel's work for the railways of the Ottoman empire are concentrated entirely in Munich, and one box in particular (NL 13II/17) contains a spectacular collection of previously unpublished maps of various parts of the empire. None of the twelve maps are dated, but cross-referencing

them with von Pressel's written records (primarily communications to the Porte) places their dates at various points between 1872 and 1876. All of the drawings are labeled and annotated in at least French, a language of which von Pressel appears to have had a firm grasp, and the use of which indicates that the Ottoman ministerial authorities were the maps' immediate audience. The drawings are executed with ink pen and wash on board that is approximately one centimeter thick. Pencil tracings are evident beneath the ink in certain instances.

The drawings in the first set were most likely executed in late 1872 or 1873. The region that von Pressel studies, spanning from the Persian Gulf outlets in Irak to the Gulf of Alexandretta, would become the corridor for the bulk of the Baghdad Railway—whose construction would begin more than three decades later. The maps as well as von Pressel's report indicate a specific trace for railways and branch lines from the one maritime outlet to the other, and many, but not all, of the stops and routes von Pressel prescribes would eventually form part of the Baghdad Railway. As mentioned in Chapter One, von Pressel lamented that his plans for a railway connecting the Mediterranean with the Persian Gulf were being overlooked by the Porte and, in the case of the railways of European Turkey, were being appropriated and authorized to other parties. Von Pressel would in all likelihood have been even more outraged (and perhaps also flattered) to see how closely the final designs of the Baghdad Railway follow his Syrian and Mesopotamian studies. It is not known whether the Baghdad Railway engineers received von Pressel's then twenty-seven-year-old studies in 1899, when Deutsche Bank's major expedition to Baghdad to survey the route onward from Konya began, but the possibility seems strong. On the one hand, the considerable parallels between von Pressel's c. 1872

study and the plans that were confirmed for definite construction around 1904 may simply testify to von Pressel's aptitude for railway surveying and his ability to solve the complex calculus involved in creating a line that simultaneously met the objectives of being as affordable to build as possible, circumventing major topographic challenges, and touching down in cities and towns where a railway line could reasonably develop economically and rail transport had at least some practical value. On the other hand, the parallels could mean that von Pressel's study in fact guided the vast majority of the ultimate trace of the Baghdad Railway and has hitherto received no credit as such. This study asserts the strong possibility of the latter.

It is also noteworthy that in later correspondence with the Grand Vizier, von Pressel outlined a list of the reports he had provided to the Porte—in an effort to ascertain not only when he would be reimbursed (he apparently paid most of his expenses out of his own pocket) but also whether the pending projects would ever actually get underway.¹⁰ The list reveals that the studies of Syria and Mesopotamia, although probably the most extensive of all, were just the tip of the iceberg in von Pressel's overall graphic output:

1. Expertise about the Üsküdar [Scutari]-İzmit line.
2. First report on the Anatolian network.
3. Exploration for the Northwest network of Anatolia, preliminary and detailed project report.
4. Report on measures taken to promptly implement the rail network in Rumelia and the advisability of establishing lines around the Strouna valley.

¹⁰ Wilhelm von Pressel to Mahmoud Pasha, Constantinople, December 10, 1875, DM NL 13II/24.

5. Report indicating the measures to prevent, by means of a slight sacrifice, the Hermanli-Yambol detour along the Kotel-Burgas trace and the serious disadvantages posed by the remoteness of the Edirne station relative to the city.
6. Obtainment, after a long and obstinate struggle, of the path-crossing agreement between “Yarembey” and Sofia.
7. Detailed quotes for all lines in Rumelia, quotes accompanied by a report and specification (made for His Highness Essad Pasha).
8. Report on the establishment of the final line to Constantinople.
9. [Report on] the receiving line “Schutaldja-Adrianople” [Edirne].
10. Report on the junctions of Bosnia.
11. Review and report on the state of the Üsküdar [Scutari]-İzmit line.
12. Report on the construction system to be adopted in Turkey (narrow gauge).
13. Report on drawbacks of the Board’s [decision] and calling for its annulment.
14. Reports on the choice of the “Yamboli-Choum[en?]” trace and in its importance to the society of Rumelia.
15. Report on the railways made in Rumelia and the economic situation they serve.¹¹

It is worth examining von Pressel’s drawings accompanying the list items 1, 2, and 3 in tandem with a close reading of the report, not least because the drawings are

¹¹ Ibid., 14–15. “1. Expertise de la ligne de Scutari-Ismidt, 2. Premier rapport sur le réseau d’Anatolie, 3. Exploration pour le réseau Nord-Ouest de l’Anatolie, projet préliminaire et rapport détaillé, 4. Rapport sur les mesures à prendre pour l’exécution à bref délai du réseau de Roumélie et sur l’opportunité de l’établissement des lignes de Widdin de la vallée de la Strouna, 5. Rapport indiquant les mesures à prendre pour éviter, au moyen d’un léger sacrifice, les détours de trace d’Hermanly-Yamboli de Kouteli-Bourgass, ainsi que les graves inconvénients que présente l’éloignement de la gare d’Adrinople, par rapport à la ville même, 6. Obtention, après une lutte prolongée et opiniâtre, du tracé accord du passage entre Yarembey et Sofia, 7. Devis détaillé de toutes les lignes de Roumélie, qui s’accompagne d’un rapport et d’un Cahier des charges (Travail fait d’ordre de son Altesse Essad Pacha), 8. Rapport sur l’établissement de la définitive [?] de Constantinople, 9. Réception de la ligne Schutaldja-Adrinople, 10. Rapport sur les jonctions de Bosnie, 11. Examen et rapport sur l’état de la ligne Scutari-Ismidt, 12. Rapport sur le système de construction à adopter en Turquie (petit écartement), 13. Rapport sur les inconvénients de la Régie et demande de sa suppression, 14. Rapports sur le choix du tracé de la ligne Yamboli-Choum...[illisible] et sur les prétentions à cet égard de la Société de Roumélie, 15. Rapport sur les voies ferrées faites et à faire en Roumélie, sur la situation économique des contrées à desservir.”

exceptional as visual objects. More concretely, they are very likely to be the first detailed topographic studies of the regions in question, and von Pressel's mapping of a handful of cities and towns along the way also provides an extremely useful portrait of Ottoman urban form in the 1870s. The nine chapters of the accompanying report—Topography and Hydrology, Geology, Construction Conditions, Population, State of the Culture, Functions of the Line, Summary of Curves and Slopes, System of Construction, and Timeframe for the Execution of Stations—are typical of railway survey reports of that day, reporting as they do on the basic conditions of the land and its settlements, the anticipated methods to be used in the construction and the challenges its engineers could anticipate in its construction. The most significant difference from standard European railway surveys was the more ethnocentric focus on cultural aspects of the region, especially evident in Chapters 4 (Population) and 5 (State of the Culture). The study subdivides a band of land spanning from a port indicated as “Desudia” (likely contemporary Arsuz) to the port of Alexandretta, proceeding from east to west. Two maps (CD65185 and CD65192) correspond to the report, and both, when fully folded, have the size of a standard folio from that time. The folio's edges are protected with a thin purplish-pink fabric tape, and the material itself is a thick-ply cardboard with a mesh-like fabric backing.

The maps reach their full splendor when completely expanded from their rectangular fronts and backs. As the result of a precise orchestration of quadrilateral cardboard sections and diagonal incisions, the meandering trace of the railway lines obtains a scenographic effect in plan by forming a snakelike line when the maps are fully expanded. This compositional technique also downplays the maps' relationship to

cardinal directions. The formidable dimensions suggest that the maps, which were clearly intended to be portable when folded, were most likely also intended to be displayed against a wall when unfolded, as their dimensions would be too large to fit on even a relatively large tabletop.

Map CD65185 [Fig. 3.27] actually consists of two maps. At its leftmost edge there is a small-scale map that spans from Baghdad on the right to the Gulf of Alexandretta on the left. Topographic contours rendered in fine dark pencil lines are provided sporadically, which indicates what was known and what was not. The topographic information is provided as far southwest as Damascus, as far southeast as Baghdad, and in the north in the area around Kharput (today Elâzığ). In this smaller map, von Pressel demarcated with a thick red line not one railway line but rather a network of two major lines, one extending in the south from Baghdad to Homs largely along the Euphrates's southern bank and then onward to Tripoli, and the other extending in the north from Baghdad to Birecik ("Biredjik") via Mosul and Mardin. The latter line has several branches as well as arm lines. The branch lines include a line extending a bit northward of Zakho. One arm line is denoted by a dotted line along the stretch from Kirkuk to Mosul that circumvents Erbil and thus appears to spare the railway trace some difficult terrain. The other arm splits at Mardin and touches down at Diyarbakır and Savur ("Süvereh") before rejoining the main line at Şanlıurfa. Shortly past Birecik, the line splits into two, with one segment going to Aleppo and the other proceeding toward Alexandretta via Gaziantep. Between Gaziantep and Birecik, there is a line that connects the two branches. At Aleppo the line again splits into two. A northern branch proceeds to

the Mediterranean port at Samandağ (“Suedia”) via Antakya, while the southern line goes to Homs, where it connects with the southern line from Baghdad.

Some notational and graphic elements bear mention. First and foremost, von Pressel created a legible system for understanding which are major cities—these are written orthogonally—and which are more minor cities—these are written in italics, including the curious instance of Aleppo. Beyond the blue rendering of rivers and small lakes and the denotation of the “Desert,” there is little additional information contained within this section of the map except, notably, at the Syrian town of Tadmur, beneath which Pressel writes “R: Palmyra,” the “R” likely being an abbreviation of the word “ruins” (*ruines* in French).

The much larger and detailed map to the right of this regional overview details only the railway line from Baghdad northward. This suggests that the southern route was sketched on the map as a possibility, while the northern route was seriously advocated because of its far more significant economic and practical potential, as it traversed a band of land with a much more significant population density. The western terminus on the map is Mardin, indicating that city’s status as the beginning of one segment and the end of another and suggesting that Mardin was conceived as roughly the halfway point of the railway line. Railway stops are denoted with a pin-shaped graphic symbol whose circular head is half empty and half filled in red. Two cities along the trace, Kirkuk and Mardin, are demarcated as red color blocks and give a rough idea of the shape of the developed limits of the cities at the time of the map’s production. It is noteworthy that some significant cities, including Baghdad and Diyarbakır, have no such outlines.

The second map of the set, CD65192 [Fig. 3.28], also contains a map of the greater region on its left edge, identical to that on the first map except that here the name of Aleppo (“Alep”) is written orthogonally, like the names of the other larger cities, and not in italics. Additionally, a table of intercity distances is provided in the upper right corner, tabulating a total of 2,454 kilometers of trace in the region. The detailed portion of the map extends the previous trace onward from Mardin to both of its potential Mediterranean maritime outlets, at Samandağ and İskenderun. Similar graphic standards are applied. Cities with color-block outlines in this map include Mardin, Diyarbakır, Şanlıurfa, Alexandretta, Aleppo, and Antakya, which is anomalously shaded in dark blue. While Palmyra is noted in the regional map, there is no indication of additional known archaeological sites within a stone’s throw of the railway’s trace, such as Samarra, or ones that had yet to have been discovered, such as Tell Halaf or Mount Nemrut, that come remarkably close to von Pressel’s traces.

The maps for von Pressel’s trans-Syrian railways are supplemented by evocative maps detailing the conditions of particular cities. For the first section, east of Mardin, four individual folios depict Baghdad (CD65186), Tuz Khormato (Touz-Khourmatli; CD65187), Kirkuk (CD65188), and Mosul (CD65189). Like their parent map, these folios have edges sealed with the purplish-pink fabric tape. They are, however, rectangular in format, and rather than bend with the format, the projected railway lines snake through the composition with a bold red line. When folded, these folios match the dimensions of their parent folio. For unknown reasons, the folio containing the urban studies for the second map (CD65184) consolidates these into a long linear strip of city plans that include, from left to right, Antakya, Aleppo, Gaziantep, Birecik, Şanlıurfa,

Diyarbakır, and Mardin. The Mardin section has a small flap that extends southward to include the hamlet of Çiftlikköy (“Gollikeni”). The consolidation of the urban studies within a single folio is not the only difference from the first map; the second map does not render the trace of the railway through or past these cities, and as a consequence, the map is dedicated to examining the cities as forms unrelated to the railway. The reasons for this are unknown, but it is significant to note that these are the cities among those appearing in the study that had a predominantly Turkish as opposed to Arab population. The graphic elements also differ. The edges, for example, are sealed with green tape, not purplish-pink, and each individual city plan uses markedly different colors to indicate the various elements contained within it, which gives the plans a slightly more artistic and certainly more heterogeneous character compared to the maps of the cities in Irak province. All of the maps provide detailed information about major monuments, locations, and natural aspects of the cities, as well as significant architectural aspects. Additionally, the red color blocks, which indicate city forms as a whole on the larger maps, here indicate blocks of developed structures that are broken by white lines indicating streets. It is not entirely clear whether every street is drawn, although this seems unlikely. It seems more likely that the streets that are rendered are the more significant and wider thoroughfares.

Proceeding from Baghdad westward, the sequence begins with map CD63161 [Fig. 3.29]. This map of Baghdad is perhaps the most detailed and elegant of the sequence. Rather than being organized cardinally, the map is oriented in such a way that the Tigris River forms a rough central axis. Baghdad is depicted below the center enclosed by its fortifications, while the suburban towns of Gazim and Mazim are pictured

to the north. Although the color blocks provide an excellent impression of which parts of Baghdad and its environs were developed, only a select handful of specific sites are identified with italicized notations. Outside of the fortified city, these include four brickyards (*briqueteries*), three cemeteries, two cemeteries (presumably Muslim) to the northwest and the English cemetery to the south, two tombs (*türbes*) on the western bank of the Tigris, and the public gardens, paper mill, and quarantine facility, all along the Tigris's northeastern banks. Within the fortified city, two barracks, the arsenal, the casino, and the *konak* are all depicted within walking distance of the riverbank. At the less developed eastern edge of the city's fortified area, von Pressel indicates the location of a powder factory as well as the important Sheikh Omar gate ("Cheh Omer Kapusi" [Turkish: Şeyh Ömer Kapısı]). This highly selective set of annotations is significant. While several of the locations indicate standard, important civic spaces, there is also an emphasis on military and industrial sites, indicating that the railway in Baghdad, as in the other urban studies, is conceived in relation to them.¹²

What would appear to be the planned location for a station is marked by a red pinhead, this time fully filled in. The pinhead is placed at the railway's intersection with a road adjacent to the English cemetery, which in turn leads into the city through its southern fortifications and what looks like a more bucolic part of the city comprising villas set amidst greenery. The railway trace approaches the city directly from the north on its way to its stop and then turns sharply, changing its course to an easterly direction as it leaves the city.

¹² For an excellent portrait of Baghdad c. 1872, including many projects that were being developed on the ground (trams, etc.), see Edwin Black, *Banking on Baghdad: Inside Iraq's 7,000-Year History of War, Profit, and Conflict* (Hoboken, NJ: John Wiley & Sons, 2004), esp. 71–112.

Von Pressel uses a similar annotation system for the folio of Tuz Khormato (“Touz-Khourmatli”) [Fig. 3.30], in this instance reorienting the composition so that the north is in the upper left portion of the landscape-formatted map. The unfortified city straddles a small tributary of the Tigris River, the Aksu, and the only special sites noted are cemeteries on both the east and the west sides of the city along with a *türbe* (for “Thurakanetti”) further to the east. The city is flush to the left of the composition, which appears to be designed to provide space for the “Kalavand” (a complex possibly referring to a structure similar to the Qalawun of Cairo) to the south, which comprises two long rectangular buildings.

Von Pressel’s study of Kirkuk [Fig. 3.31] similarly sets the city flush along an edge, in this case in the lower portion of the map. While there is no indication of which direction is north, it is roughly directly upward. Kirkuk’s urban structure is more diffuse than those of Baghdad and Tuz Khormato. On the eastern bank of the Khasa River, von Pressel illustrates the old part of the city atop a plateau, while newer parts of the city flank the plateau’s eastern foot. Another settlement on the western bank of the Khasa labeled as “Mahalé” in italics, is divided from the historic part of the city by the railway trace, where there is a lone annotation for the barracks and *konak* (here written as “conak”). The station pinhead is slightly to the south of this, and while a large portion north of Kirkuk is shown on the map, there is no indication of anything of note being there.

Von Pressel’s study of Mosul (“Mosoul”) is among his most revelatory [Fig. 3.32]. Again, north is not indicated but is roughly directly upward. The composition’s most striking feature is the railway trace’s unapologetic penetration of the expansive

ruins of Nineveh, the ancient Assyrian city, on the eastern side of the Tigris opposite Mosul. In fact, the railway trace appears to even utilize existing openings in the fortifying mounds of the ancient city to enter and exit its domain. The pinhead is placed at the railway's trisection with east-west and north-south roads within the site that meander to eventually arrive at the lone river crossing to the city center of Mosul, circumventing its fortifications. Von Pressel notes a large number of sites, including all six of the main city gates ("Topkapi", "Ghizehkapi", "Yeghikapi", "Youmourtakapi", "Sindjarkapi", and "Chattkapi"). South of the city walls stand the cemetery, *konak*, and barracks. Von Pressel appears particularly well acquainted with the city, as he indicates not only a far greater capillary-like network of streets and alleyways but also locations (presumably centers of worship) for a number of key religious figures, marked either with *Cheh* (Sheikh) or *Ymam* (Imam). The sheikhs include Fathey, Mansour, and Ibrahim, and the imams include et Bahr, Abul-Kerim and Abd ur Rahman. Further south, von Pressel notes the French consulate, set in a generous garden hugging a bend of the Tigris.

Map CD63161 depicts a branch from the main line between Mosul and Mardin that moves towards Carchemish past Zakho along the Little Khabur River, which forms the modern border between Iraq and Turkey [Fig. 3.33]. This is the sole map that has Ottoman as well as French annotations, which suggests that at least part of its intended audience included provincial officials who did not speak French. The Ottoman names of cities are listed above the French toponyms, and the Ottoman names for mountains, rivers, and mountain passageways are given below the French toponyms. Another significant difference between this map and the others is the absence of pinheads; stations are instead demarcated with red rectangular blocks and the word *station*. The

composition is in landscape format with north, again not indicated, roughly directly upward. A small flap in the upper middle part allows the village of Nahrwan (“Nahrwan”) to be included in the road network that crisscrosses the composition as it connects small population centers. Because of the larger regional scale of the map, no buildings or specific sites are noted.

Moving from left to right within the Anatolian urban studies folio [Fig. 3.34], von Pressel begins with Antakya. The map, comprising two panels, centers on the east-west axis of the Orontes River. The modern city of Antakya is tucked into a valley between the foot of the Amanus Mountains and the southern bank of the Orontes [Fig. 3.35]. No buildings are noted except a café on the far eastern edge of the city along the road to Aleppo. Additionally, numerous ruins are denoted on all sides of the modern city, and an aqueduct, detailed down to its piers, is denoted on the northern edge of the Orontes. The depiction of Aleppo [Fig. 3.36], also in two panels, is focused squarely on its famed citadel, which appears to still have its moat filled with water. Von Pressel notes the presence of an *ancien Chateau* (ancient castle) within the citadel. Immediately surrounding the moat, three sites are labeled: the *konak* and two hans, “Vezir” and “Khourdse.” To the north are Christian and Muslim cemeteries, as well as the “Yeni Mahale” (New Plaza [Turkish: Mahalle]). The map of Birecik [Fig. 3.37] comprises a single panel centered on the roughly north-south course of the Euphrates. The city’s steep topography is plainly evident through the thick brown contour lines that encircle the settlement on the river’s eastern edge. Two ruined chateaux are noted, although the more southerly of the two would more aptly be labeled as a garrison. On the western

bank of the river stands a han, as well as the villa residence of “Rouchdi Pacha Tchiflik” (Rushdie Pasha Çiftlik [Turkish: Rüşdi Paşa Çiftliği]).

Diyarbakır [Fig. 3.38] also appears on a single panel and also appears to be entirely delimited by its fortifications, atop a bluff along the Tigris. Four important sites are noted, all well outside of the fortifications: the *konak*, “Alipounarkeni,” the “Osman Pacha Tschiflik,” and the “Keterbilikenı.” The most dramatic of the studies is of Mardin [Fig. 3.39], which, like Diyarbakır, remains circumscribed by its fortifications that trace the footprint of a dramatic bluff with a commanding watch over the surrounding landscape. Unique traits of this study include a small flap that pulls out at the bottom of the map to include the southern hamlet of Çiftlikköy, as well as the different typographic treatment of the word “Mardin” itself: black letters highlighted by red shadowing. Three sites are identified, all outside of the fortifications: the “Tchiftlik,” “Mehenkeni,” and “Mansourkeni.”

Von Pressel’s depiction of Gaziantep [Fig. 3.40] notes a handful of important sites: three mosques—“Cheik Omer Djami,” “Ouloun Djami,” and one that is unnamed, the old city castle (*ancien chateau de la ville en ruines*), the *konak*, the Armenian church, and the Christian and Muslim cemeteries. Şanlıurfa [Fig. 3.41] is similarly depicted on a single panel and appears to have the vast majority of its fortifications intact. A handful of significant sites are noted: the ruined castle, several gates— “Beg Kapou,” “Samsat Kapou,” “Yeni Kapou,” and “Harankapou”—as well as the “Rachiran Djami” (the Great Mosque of Urfa), an unnamed church, and Christian and Muslim cemeteries.

A single board without a fold that depicts İskenderun (labeled as “Alexandrette”) [Fig. 3.42] rounds out the series. The railway trace approaches its Mediterranean port

from the south before swiftly curving inward and ending parallel to the shoreline. Von Pressel's dramatic image outlines what appears to be a major pier on which the railway would terminate, separating the settlement from the natural shoreline. Two docks project from the pier, presumably for ships, and a breakwater set further in the water appears to be intended to reduce waves and to navigate maritime traffic in a single direction, reinforced by von Pressel's stipulation of an entry and an exit. No sites of interest are marked on the map apart from a cemetery south of the city.

Sometime between 1874 and 1876, von Pressel issued at least two additional maps (CD65190 and CD65191) to the Porte, focusing on further development of the railways east of Haydarpaşa. One map depicts Haydarpaşa and the greater environs of the Asian shore of the Bosphorus [Fig. 3.43], while the other [Fig. 3.44] depicts what appears to be a segment of a larger line (although the greater context has not been found), depicted here traversing the area past İzmit, around Lake Sapanca ("Sabandja"), and south thereof. The map of Haydarpaşa and environs is sealed in the familiar purplish-pink fabric tape, while the İzmit-Sapanca map is unsealed. An image of the same region taken by Berggren decades later illustrates the marshy, challenging nature of this part of the railway line. [Fig. 3.45]

The map of İstanbul's Asian shore has a prominent title and legend in its upper left portion. The title reads "CHEMIN DE FER / HAIDERPACHA-SCUTARI-GÖKSOUYOU," and the legend indicates a graphic code for the drawings: various forms of *pochée* and shading that provide some insight into and continuity with the graphics of the earlier maps. From top to bottom and left to right, the legend identifies the red color blocks of urban settlement as *quartiers* (quarters) that are distinct from individual houses

(*maison seule*), rendered as small red rectangles. Among the red color blocks, mosques are denoted with a bluish dot. In a variety of shades of green and orange and with small graphic symbols, six land types are codified: *jardins* (gardens), *vignes* (vineyards), *champs* (fields), *paturages* (pastures), *cimetieres* (cemeteries), and *prairies* (meadows). Roads, narrower paths, and topographic bluffs are rendered in shades of brown and black. Within the projected railway traces outlined in von Pressel's map, blue lines indicate topographic ascents while red lines indicate topographic descents. Stations are demarcated by long rectangles that are pierced by the continuous blue and red lines. The final codified elements are ferry stations, demarcated by black ferries coughing steam. Von Pressel draws topographic contour lines in the map in 5-meter increments and demarcates distances along each railway trace in 100-meter increments. Throughout the map, the elevations of certain points are noted with a number next to a small "x".

Von Pressel's map encompasses virtually all of the inhabited portion of İstanbul's Asian shore c. 1876, reaching the imperial kiosk just north of Kandilli and as far south along the Bosphorus as the peninsula at Fenerbahçe. The map extends as far east as (south to north) Merdivenköy "Verdivenikeui," "Fours Chieaux," and Hekimbaşı Ciftlik "Haekimbachi Tchiflik." The map also provides remarkably detailed information for numerous Bosphorus neighborhoods, including Kandilli, Vanıköy, Çengelköy ("Dschengelkeui"), Beylerbeyi (with its relatively new imperial palace), Kousgoundjouk, Üsküdar ("Scutari"), Haydarpaşa, and Kadıköy, as well as numerous *çiftliks* at the higher elevations, including "Murat Efendi" near Kadıköy, "Alibey" near Çengelköy, "Hölciogulou," and one near Üsküdar labeled simply as "S. M." Notable sites include the

Jewish cemetery and barracks at Üsküdar and the British hospital at Haydarpaşa.¹³ Pressel's map recognizes the existing line to İzmit and the buildings and port at Haydarpaşa, but makes no graphic distinction between that line and several other traces that rather intricately link the entire region of the map and suggest a thoroughly well-connected knot of railways in Asian İstanbul, a proposal tied to Pressel's tacit contention that it was the younger Asian side of İstanbul, with its connection to the Anatolian hinterland, that would be ripe for industrialization and development in the coming decades. In addition to the maritime outlet at Haydarpaşa, von Pressel designed a second outlet further north at Göksuyu, which extends eastward to a proposed station at Hekimbaşı Çiftlik before splitting into two different lines, one headed southeast toward Uzun Çayır ("Ouson Tschair"), with stops at Elmadağ and Merdivenköy. Before arriving at Uzun Çayır, the line converges with the other one from Hekimbaşı Çiftlik, with stops at Sultan Çiftlik, Çamlıca, and Beylerbeyi. The convergent lines at Uzun Çayır proceed either directly to Haydarpaşa or onward to İzmit, the latter indicated by an arrow.

The İzmit-Sapanca map appears to be more of a working drawing that was never used for a public presentation, a supposition reinforced by the absence of the sealing tape, the lack of a title or a legend, the presence of numerous stray pencil markings, unfinished and *unpochéed* elements, and what appear to be two competing traces, one in black and the other in red. The map, like those of the line across Arabia and Anatolia, has a shape that mimics the trace of the railway, which is roughly similar to the shape of the numeral "7". No stations are indicated on the map. İzmit is located at the very upper left edge of the map, and the black and red lines crisscross one another as they proceed eastward

¹³ This structure is famous as the site where Florence Nightingale, popularly known as the "Lady with the Lamp," tended to the wounded during the Crimean War.

along the southern shore of Lake Sapanca. At the eastern terminus of Lake Sapanca, the lines diverge, the red line proceeding northward toward Adapazarı and the black line proceeding due south and quickly entering the deep gorge of the Sakarya river, which the railway hugs for most of its southerly course. The map terminates a bit south of Mecidiye. This would become, to almost the precise coordinates, part of the course of the Anatolian railway.

The final map in the box, probably executed sometime around 1876, depicts von Pressel's proposed railway trace from Kostajnica ("Kostainica") south along the Una River (the border with Austria-Hungary) toward Novi Grad, where the Una meets the Sana River [Fig. 3.46]. The map, perhaps the most elegant of all, appears to be incomplete, as suggested by the numerous pencil tracings south of the hamlet of Kuljani ("Kuljahi") that indicate Pressel's deliberations about where precisely to place the railway. These include pencil markings on either side of the river. The map is rectangular and, unlike the other maps, is annotated exclusively in German, in all likelihood because it was produced for an Austro-Hungarian study rather than an Ottoman one.

The von Pressel folios are a formidable collection on several levels. At the level of knowledge, they provide hitherto unknown details of both the topography and the characteristics of a number of places across the Ottoman empire. Yet more synthetically, their unexpected beauty underscores the often artful results that Humboldtian geographic methods could produce, and they testify to the engineer's capacity to perceive both landscape and urban form with an artist's eye. Their artfulness speaks equally to their intended functions as showpieces, in all likelihood for the Ottoman Ministry of the Interior, and as such also speaks volumes to the ways in which European methods of

measurement, surveying, and representation were coalesced and packaged for a non-European client. The package derives its potency from its clear use of color, its deployment of graphic symbols, and its playful and enticing format. In an entirely positive way, it might be said that the von Pressel folios have the air of a graphic story for children and an elegant, accessible beauty that translates the penetration of the rail in a movement through space and unique destinations, privileging the railways' scenographic qualities by cleverly downplaying their political aspects. There are, to the author's knowledge, no other comparable "packages" anywhere for railway survey maps, which underscores the singular importance of the von Pressel folios.

Accompanying the folios of maps of locations within Syria and the Mediterranean is a report dated June 10, 1874 and entitled *Lignes du Syrie* (Lines of Syria).¹⁴ The report, written in French and, it would appear, submitted to Mahmud Pasha (of the Ottoman Ministry of the Interior), repeats several of the motifs of von Pressel's earlier reports on Bosnia but is filtered into less editorial, more straightforward prose about the feasibility of a railway connecting the Mediterranean and the Persian Gulf. Chapter 3 ("Conditions of Construction"), for example, similarly enumerates the relative pros and cons of various indigenous labor groups but is far more parsimonious about which ethnic groups are which, naming just three: Arabs, Kurds, and "Turcomans," and the language is untinged with racial platitudes (although it still has palpable bias).

¹⁴ See *Lignes du Syrie*, DM NL 13II/24. The chapters of the report are as follows (translated from French): Chapter 1: Topography and Hydrology, Chapter 2: Geology, Chapter 3: Conditions of Construction, Chapter 4: Population, Chapter 5: State of Culture, Chapter 6: Functions of the Line, Chapter 7: Summary of Curves and Slopes, Chapter 8: System of Construction, Chapter 9: Period of Execution, and Chapter 10: Stations. I suspect that the maps were produced significantly earlier than the publication of the report; hence the earlier dating.

Von Pressel's report is the first archival document to suggest the relative hierarchies that the Ottoman government should assign to its cities, in this case assigning each of the cities between Mardin and the Mediterranean the status of a Class I, II, III, or IV station. Samandağ and İskendrun are the only Class I stations, a result of their status as the two Mediterranean termini. Gaziantep, Aleppo, and Mardin are the Class II stations, and Antakya, Eshref, Birecik, Hevek, and Şanlıurfa are the Class III stations. All remaining stations are Class IV. In addition to the fact that the Samandağ line would never be built, it is noteworthy that Holzmann, the Baghdad railway engineers, and the Ottoman Ministry of the Interior would eventually digress from von Pressel's proposals for the urban hierarchies, most importantly promoting Aleppo from a Class II to a Class I station. Because Aleppo is historically more important for its monuments than its economic or political significance, this indicates Von Pressel's predilection for a strictly geographical, rather than geohistorical ordering of Ottoman cities. That Aleppo was ultimately promoted to a first class station is, in all likelihood, indicative of Ottoman agency, which changed the norm for imperial urban ordering from geographical to a more balanced mix between geographical and geohistorical. This reveals that what is missing from Pressel's topography is an understanding of the Ottoman cultural norms of decorum. His is the gaze of the engineer, not the historian or purveyor of cultural monuments. In this sense, Pressel's maps fail as veritable maps of topography as it is historically constructed.

Indeed, while von Pressel's proposed hierarchy for his network of interconnected cities in Syria was based on his perceptions of the cities' relative economic importance and population, the system also largely derives from his study of the region's topography

and hydrography, subjects that constitute the first and longest chapter of the report. Von Pressel's report divides the entire region into eight distinct topographic regions¹⁵ that he describes in painstaking detail without, it becomes clear, any points of reference or preexisting topographic information. His topographic descriptions cover a breathtaking lexicon—plain, plateau, glade, ravine, gorge, marsh, oasis, desert, outcropping, sinkhole, riverbed, etc.—and along with descriptions of the quality of the soil, the hardness of the rock, and aridness and fecundity, make for a highly convincing narrative corollary to the folios. In fact, although extended notations are lacking, the color schemes of at least some of the folios appear to correspond with Pressel's eight distinct regions. In toto, the von Pressel folios illuminate a coordinated graphic strategy that pitched a balanced mix of necessary topographic information with graphic legibility and attractiveness. They provide excellent insight into the dynamic roles not only of the maps but also of the engineer as both surveyor and artistic interpreter of the railway network.

3.4 The Černik Expedition of North Syria, the Tigris, and Euphrates

In 1875, the engineer Josef Černik (fl. 1870–1880) published a report entitled *Technische Studien-Expedition durch die Gebiete des Euphrat und Tigris nebst Ein- und Ausgangs-Routen durch Nord-Syrien: Nach den Tagebüchern, topographischen Aufnahmen und mündlichen Mittheilungen des Expeditions-Leiters* (Technical Study

¹⁵ The regions are: 1. "La vallée de l'Oronte et la plaine de l'El Amk, du port de Suedia jusqu'à Yéni-Cheïr," 2. "Le haut plateau mamelouré de Yéni-Cheïr à Aintab," 3. "Le plateau montagneux des deux bords de l'Euphrate, de Yachden jusqu'à Ourfa," 4. "Le plateau élevé, soi-disant désert, existant entre Ourfa et Mardin," 5. "Le Karadja-Dagh, variante de Diarbékir à Ourfa," 6. "La [illegible] entre le Liban et Djebel-Ansaïrieh, de Tripoli à Homs," 7. "Le plateau mamelouré, entre Homs et Alep," and 8. "Terrain montagneux entre Alexandrette et Aïntab."

Expedition through the Regions of the Euphrates and Tigris in Addition to Incoming and Outgoing Routes through Northern Syria: According to the Diaries, Topographic Surveys and Oral Reports of the Expedition Leader)¹⁶ that, while conceived and facilitated by von Pressel, is primarily designed as a scientific topographic study unrelated to railway construction.¹⁷ The report complements von Pressel's study of Anatolia and western Syria, reporting on the eastern half of the land between the Mediterranean and the Persian Gulf in significantly greater detail (the report is 47 pages long, with 3 maps). Černík's study divides the region into four subregions: 1) from Carchemish to the Euphrates Valley by way of Homs and Palmyra ("Têdmur"), 2) the Euphrates between "Deir" (presumably modern Deir ez-Zor) and Hit, 3) the flats of Baghdad, and 4) the Kurdish outlands. Černík conducted the study between late Fall of 1872 and Spring of 1873, assisted by three professional topographers: Carlo Cedeeraschi, Eugène Girardot, and Johann Binder.¹⁸ With his distinct interest in toponymy and his extensive description of landforms, Černík abides by classic modes of exegesis in the discipline of topography. Černík's lexicon for topography, flora, and fauna is as broad as it is creative. A sample of excerpts paints a considerably more poetic picture of Ottoman lands than those of von Pressel. In some instances the geographical descriptions evoke historical landscapes and bygone glory:

¹⁶ Josef Černík, *Technische Studien-Expedition durch die Gebiete des Euphrat und Tigris nebst Ein- und Ausgangs-Routen durch Nord-Syrien: Nach den Tagebüchern, topographischen Aufnahmen und mündlichen Mittheilungen des Expeditions-Leiters* (Gotha: Justus Perthes, 1875). Located in SPG Geogr 4° 0021/01 (10, 44).

¹⁷ The volume is, in fact, bestowed (*zugeeignet*) to von Pressel, who is thanked in the foreword. Ibid., vii.

¹⁸ Ibid., vii–viii.

At the end of the upper part of the wildly romantic, almost paradisiacal valley of Nahr Kadischah [sic], that enquils the snowy peaks of Djebel Machmel [sic], spreads onto the Syrian seashore's delta-like littoral, the territory of which captures the traveler's attention as much for its decorative vegetation, as it reminds him of reaching back into the cultural epoch of Phoenician history which, as it is probably unlikely to occur at this place ever again, has an importance to us today that is more intense than ever before.¹⁹

In other landscapes, typically urban, the presence of history is subordinated to the runoff of contemporary life:

[Baghdad] is situated on both banks of the Tigris, but the complex on the right bank is really only a suburb while the trade, industry, and public life [of the city] are concentrated in the northern sections where [one finds] the big bazaar, the more beautiful mosques, the hans, and the castle-like barracks. The city walls [are] mostly destroyed, with filled ditches and dilapidated towers.²⁰

In a second volume, published a year later in 1876, Černik doubles back and traces a new route returning to North Syria. The sections are divided again to produce 5) "Von Kleinen Zarb über Mosul in's Chabur Thal" (From Little Zarb via Mosul into the Khabur Valley), 6) "Hoch Mesopotamien" (High Mesopotamia), 7) "Route durch Nord-Syrien" (Route through North Syria), and an appendix.²¹ This volume contains four maps.

¹⁹ Ibid., 1. "Am Ende des wildromantischen, an seinem oberen Theile geradezu paradiesischen Thales des Nahr Kadischah, der den Schneegipfeln des Djebel Machmel entquilt, breitet sich an der Syrischen Meeresküste ein deltaartiges Litorale aus, dessen Gebiet für den Reisenden eben so sehr wegen seines Vegetationsschmuckes, fesselnd erscheint, als es in Folge der weit in die Phöniscische Geschichte hinaufreichenden Reminiscenzen an eine Culturepoche, wie sie an diesen Gestanden wohl schwerlich je wieder auftreten wird, gemahnt, deren Bedeutung uns Heute intensiver erfasst, den je zuvor."

²⁰ Ibid., 27. "Sie [Baghdad] ist an beiden Ufern des Tigris gelegen, doch wird der Complex an rechten Flussufer nur als Vorstadt betrachtet und concentrirt sich sowohl der Handel, das Gewerbe, als auch das öffentliche Leben nur in dem nördlichen Abschnitte der Stadt, wo sich auch die grossen Bazars, die schöneren Moscheen, die Chans und die castellartige Kaserne befinden. Die Stadtmauern, vielfach zerstört, mit ausgefüllten Gräben und baufälligen Thürmen."

²¹ Josef Černik, *Technische Studien-Expedition durch die Gebiete des Euphrat und Tigris nebst Ein- und Ausgangs-Routen durch Nord-Syrien: Nach den Tagebüchern, topographischen Aufnahmen und mündlichen Mittheilungen des Expeditions-Leiters* (Gotha: Justus Perthes, 1876). Located in SPG Geogr 4° 0021/01 (10, 44).

The two volumes were published by Justus Perthes in Gotha near Erfurt in tandem with the expedition report. In the first volume, Černík traces the study route from Tripoli (“Tarâbulus”) to Baghdad [Figs. 3.47–3.48] with two maps. The maps, much like von Pressels’s, fill in topographic information in the direct vicinity of the studied path, which spans a very narrow region (at the Mediterranean coast) to some very wide regions (e.g., at the Khabur Valley). Both maps contain a number of small sectional excerpts in key regions of interest, adorning the maps’ margins. These include Wadi Khaled, the caldera of Abu al Fawaris, the caldera of Ghadir et Tair, El Meshta, Al Khalleh, the Euphrates at Anah, Hit, Al Mansuriya in Diyala province, Abu Zenabil in Diyala province, and the Aksu River basin at Tuz Khormato. In all of these excerpts, geological layers are noted stratigraphically, including at least one of each of the following types of earth: lime, clay, alluvium, basalt fragments, jura, gravel, clay marl, marl, gypsum, bituminous clay, sedimentary lime, sandstone, and glacial sediment. The map that includes Baghdad also contains break-off maps of that city and of Kirkuk, with key sites annotated.

In the second volume, Černík traces the northern portion of von Pressel’s Syrian study, from the two Mediterranean outlets to Mosul [Figs. 3.49–3.50]. The western portion contains stratigraphic excerpts of Hamam, Akpınar, “Jastidja,” “Gjömrik,” “Mischmischia” (all villages with changing toponyms), Birecik, and Diyarbakır, and breakaway maps of İskenderun and Gaziantep, while the eastern portion contains stratigraphic excerpts of Mardin, Baba Gurgur, the Tigris riverbed near Mosul, the Tigris branch at “Bebnit,” the Tigris at “Telfesna,” and Faysh Khabur, and breakaway maps of the environs of Mosul and Erbil. The stratigraphic excerpts reveal the additional elements of chalk and quartzite. A final map compiles the stratigraphic information into a single

composition that is placed alongside an ethnographic summary indicating the locations of Arabs, Turks, Kurds, Yazidi, Druze, Nestorians, Jacobites, Chaldean Christians, the Qizilbash, Nazirites, and Jews [Fig. 3.51]. Ethnicities are rendered in the same manner as the geological strata. While this was not entirely uncommon in the cartography of that time, it nonetheless reveals the simultaneity of Černík's project and von Pressel's, the former augmenting the linear information (topographic lines, the railway trace) sketched by von Pressel's studies with the volumetric information of geology and population. As the decades proceeded, so too would the filling in of linear and volumetric information, ever more rapidly.

3.5 Gottlieb Schumacher and the German Benefits of the British Exploration of Palestine

Not only was much of the earliest development of the Ottoman railway network spearheaded and/or executed by British parties; its earliest topographic exploration was as well. No other geographic region was the subject of as much intense interest as Palestine and the southern Levant more generally. There are several reasons for this. First and foremost, Ottoman Palestine did not have as comprehensive an administrative presence as did the supraregions of Rumelia and Anatolia, which made surveying and poking around easier and the subject of less suspicion, at least from those who mattered most within the Ottoman administrative hierarchy, than elsewhere.²² Second, and certainly the primary concern for many involved in the early British explorations of the

²² For discussion of the theme of autonomy in Palestine, see David Kushner, "Ottoman Governors of Palestine, 1864–1914," *Middle Eastern Studies* 23, no. 3 (July, 1987): 274–90.

Levant, the region had great historical and religious significance as the wellspring and early staging ground for Christianity as well as Judaism and Islam. Finally, the British saw the Levant as a region with considerable potential for colonization that could, like Egypt, fall under British rule if the Ottoman empire continued on a steady course of decline.

No single institution represented these currents as thoroughly as did the Palestine Exploration Fund, a society founded in 1865 by a conglomerate of geographers and biblical scholars whose mission, supposedly rid of religious significance, was to thoroughly chart the surface of Palestine under the auspices of the royal crown.²³ The founding prospectus outlines the ambitions as such:

Our object is strictly an inductive inquiry. We are not to be a religious society; we are not about to launch controversy; we are about to apply the rules of science, which are so well understood by us in our branches, to an investigation into the facts concerning the Holy Land. No country should be of so much interest to us as that in which the documents of our Faith were written, and the momentous events they describe enacted. At the same time no country more urgently requires illustration... Even to a casual traveller in the Holy Land the Bible becomes, in its form, and therefore to some extent in its substance, a new book. Much would be gained by... bringing to light the remains of so many races and generations which must lie concealed under the accumulation of rubbish and ruins on which those villages stand.²⁴

The image of a land “concealed under the accumulation of rubbish” is an inherently topographic one. To know Palestine meant to purify it of the recent past of Ottoman administration, effectively a stratigraphic layer of “rubbish” that needed to be mapped and excavated.

²³ See J. J. Moscrop, *Measuring Jerusalem: The Palestine Exploration Fund and British Interests in the Holy Land* (London: Leicester University Press, 1999).

²⁴ Quoted in V. D. Lipman, “The Origins of the Palestine Exploration Fund,” *Palestine Exploration Quarterly* 120 (1988): 45.

Early projects to this end included one by Sir Charles Wilson (1836–1905), Charles Warren (1840–1927), and Henry Birtles.²⁵ In 1872, Claude Conder (1848–1910) launched an extensive and eventful six-year topographic survey of western Palestine entitled *Tent Work in Palestine*, the majority of which was carried out by members of the Royal Corps of Engineers.²⁶ The survey went fairly well in its first few years but was ultimately hindered by the lawlessness of the region's populace, particularly the Bedouins, who attacked the surveyors near Safed in the Summer of 1875.²⁷ Although this suspended the surveys, the Palestine Exploration Fund was nonetheless able to produce a significant geographic, ethnographic, and topographic study of the region, including twenty-six highly detailed maps, in 1880.²⁸

Sometime between 1882 and 1885 the Palestine Exploration Fund, perhaps cognizant of the aggressive appearance of its engineers' presence in Palestine, decided to shift its strategy and outsourced the balance of the survey it hoped to complete east of Jordan to the leadership of Gottlieb Schumacher.²⁹ Schumacher, a civil engineer by training and architect and archaeologist through experience, grew up and was educated in both Germany and the United States, and by all accounts identified as being both German

²⁵ Sir Charles William Wilson, *The Recovery of Jerusalem: A Narrative of Exploration and Discovery in the City and the Holy Land* (London: R. Bentley & Son, 1871). See also Hunt Janin, *Four Paths to Jerusalem* (Jefferson, NC: McFarland, 2002), 172–73.

²⁶ Palestine Exploration Fund, *Quarterly Statement* (January, 1878), 6, 12.

²⁷ *Ibid.*

²⁸ Palestine Exploration Fund, *Map of Western Palestine in 26 Sheets: From Surveys Conducted for the Committee of the Palestine Exploration Fund* (London: Palestine Exploration Fund, 1880).

²⁹ A succinct biography of Schumacher has been compiled by the Palestine Exploration Fund and is published on their website. See "Gottlieb Schumacher, 1857–1925," Palestine Exploration Fund, accessed November 7, 2013, <http://www.pef.org.uk/profiles/gottlieb-schumacher>.

and American. Upon completing his engineering studies in Germany in 1881, Schumacher relocated to Haifa to join his father, a diplomat and leader of the Temple Society (a German Protestant sect established there in the 1860s), as a leader among the growing German settlers in the region. Sometime around 1881, Schumacher was appointed Chief Engineer of the province of Acre (Akko), and amidst the flurry of modernization he was responsible for the construction of numerous roads, bridges, and new urban plans for the area.³⁰ His private work included a large expansion of the German colony at Haifa, Scottish and Russian hostels in Safed, Nazareth, and Tiberias, and the Rothschild wine cellars at Rishon LeZion. The highly successful results of his work and his ability to engender the trust of locals by being one himself were not lost on the British consuls, who in all likelihood brought his name to the attention of the Palestine Exploration Fund.

Schumacher spent several years conducting topographical surveys of Jordan that were published for the Palestine Exploration Fund as *Across the Jordan: Being an Exploration and Survey of Part of Hauran and Jaulân* in 1886 and *The Survey of Jaulân: Surveyed for the German Society for the Exploration of the Holy Land* in 1888.³¹ He further surveyed about 700 square miles of northern ‘Ajlûn, published as *Abila, Pella and*

³⁰ See Ruth Kark, *American Consuls in the Holy Land, 1832–1914* (Jerusalem: Hebrew University Magnes Press, 1994), 122. For an excellent account of Schumacher’s role in the planning of Acre, see Stanley Waterman, “Pre-Israeli Planning in Palestine: The Example of Acre,” *The Town Planning Review* 42, no. 1 (January, 1971): 85–99. Thanks to Igor Demchenko for bringing the latter article to my attention.

³¹ Gottlieb Schumacher, *Across the Jordan: Being an Exploration and Survey of Part of Hauran and Jaulan* (London: R. Bentley & Son, 1886); Gottlieb Schumacher, *The Survey of Jaulân: Surveyed for the German Society for the Exploration of the Holy Land* (London: R. Bentley & Son, 1888).

Northern 'Ajlûn in 1889.³² Schumacher's communiqués with the Palestine Exploration Fund's London headquarters are voluminous and testify to a particularly collegial relationship with George Armstrong, the Palestine Exploration Fund's assistant director.³³ Schumacher frequently wrote of the difficulties of his work for the Ottoman government in his correspondence with Armstrong, noting that working for the Palestine Exploration Fund and, in effect, the British Crown was an operation far more to his liking. "I would give up my tedious and unthankful Gov[ernment] position," he noted in 1889, "and abandon myself entirely to my exploration work."³⁴ What he failed to mention, however, was how his survey work, paid for by the Palestine Exploration Fund, was also supporting a grander plan he was developing with Oliphant for the railway to connect Acre, Haifa, and Daraa with Damascus, with his studies for this plan being effectively underwritten by the Palestinian Exploration Fund. As Oliphant and Schumacher's Templars' Colony as well as Zionist ambitions³⁵ flourished in Haifa, their profound promotion of a railway connecting Haifa with the region further inland took on pannational (or pancolonial) as well as panreligious undertones. While it is unlikely that Schumacher explicitly sought to exploit the Palestine Exploration Fund to this end, he would nonetheless have been most aware of the double function of his work and the

³² Gottlieb Schumacher, *Abila, Pella and Northern 'Ajlûn* (London: Palestine Exploration Fund, 1889).

³³ Letters are held at the Palestine Exploration Fund. See PEF DA SCHUM 1-110.05 (letters and sheet).

³⁴ Gottlieb Schumacher to George Armstrong, Haifa, August 9, 1889. PEF DA SCHUM.

³⁵ See Shalom Goldman, *Zeal for Zion: Christians, Jews & the Idea of the Promised Land* (Chapel Hill, NC: The University of North Carolina Press, 2009), 63–70.

topographic information it would produce.³⁶ [Fig. 3.52]

On occasion during the course of his fifteen-year engagement with the Palestine Exploration Fund, Schumacher made earnest attempts to expand his role from topographic surveyor to geographic scientist. In October 1889, for example, Schumacher boasted of his resignation from Ottoman service and indicated to the Fund that with his newfound time, he was interested in producing an ethnographic study of Palestinian Bedouins.³⁷ Schumacher had even gone so far as to discuss the publication with the local “Bedouin committee,” who sanctioned the proposal as long as he would pay the committee 250 pounds and a ten percent share of all book sales.³⁸ Schumacher only needed the support of the military officer and geographer Sir Charles Wilson (1836–1905). The Fund politely declined the offer, claiming it was not within their current research scope, but behind the scenes there were deeper concerns about Schumacher’s scholarly skills. As Wilson put it, “Schumacher is no scholar in any sense; his copies of inscriptions are the despair of everyone I have spoken to... He is, however, a shrewd observer and has done excellent work for the Fund east of Jordan.”³⁹

While the behind-the-scenes records indicate that the Palestine Exploration Fund considered Schumacher a functionary and not a scholar, they also seemed to underestimate his savvy and greater ambition. The nature of this ambition became a bit clearer by late 1889 or early 1890, when Schumacher was approached by the Deutscher

³⁶ See Georg Egger, Laurence Oliphant, and Gottlieb Schumacher, *Eisenbahnprojekt für Syrien-Palästina* (Haifa, 1884).

³⁷ Gottlieb Schumacher to George Armstrong, Haifa, October 23, 1889, PEF DA SCHUM.

³⁸ Ibid.

³⁹ Sir Charles Wilson to Besant, Southampton, December 5, 1889, PEF DA SCHUM.

Palästina-Verein (later known as the *Deutscher Verein zur Erforschung Palästinas*; German Society for the Exploration of Palestine), an institution founded by the Swiss geographer Karl Zimmermann (fl. 1874–1880) in 1877 with a virtually identical mission and structure to that of the Palestine Exploration Fund.⁴⁰ The Deutscher Palästina-Verein asked Schumacher whether he would be interested in obtaining a permanent retainer position to assist in their own topographic ambitions in the region.⁴¹ It appears that Schumacher was rather tempted to switch his allegiances to the settlement interests of his native Germany, but ultimately weighed the prestige and greater scope of the Fund's work, as well as the new potential for an extensive Palestinian Exploration Fund-sponsored survey of the Hauran region, more favorably.⁴² Invoking the well-established British-German geopolitical rivalry, Schumacher flaunted his courting by the Deutscher Palästina-Verein to place into focus his singular importance in the European dash for influence in Palestine, an influence premised on his topographic knowledge.

Schumacher's correspondence with the Palestine Exploration Fund is also at times highly suggestive of the consonance of his topographic surveys with his findings and the development of Palestine's rail infrastructure, despite what appear to be his efforts to downplay it. In May 1889, Schumacher mentioned the approved concession of the Jaffa-Jerusalem railway alongside mention of the discovery of four earthenware sarcophagi

⁴⁰ The history and events of the Deutscher Palästina-Verein (sometimes also known as the *Deutscher Palästinaverein*) are documented in its own publication, the *Zeitschrift des Deutschen Palästina-Vereins*.

⁴¹ Gottlieb Schumacher to Palestine Exploration Fund, Haifa, January 10, 1890, PEF DA SCHUM.

⁴² Ibid.

hidden in a cave near Haifa.⁴³ Around 1891, Schumacher did accept contract work for the Deutscher Pälästina-Verein, and he wrote of the exploration of a number of exciting sites for them—Job’s Stone, Jerash, Sult, Madeba, and Nebo—along with providing an update on the progress of his railway survey between Haifa and Damascus (which indicates that he was now speaking openly about it with London).⁴⁴

The Ottoman concession in 1890 of an actual railway line from Haifa to Damascus to Shukri Bey, a Christian Lebanese engineer, and Yusuf (sometimes spelled “Yousef”) Elias, a Jewish Ottoman *effendi* and resident of Palestine, had double implications for Schumacher’s work. First, it signaled a significant protectionist impulse by the Ottoman government to shield the railways of Palestine from German and British control. Second, it indicated the Ministry of the Interior’s rather clever subversion of the topographic surveys published by the Palestine Exploration Fund a few years earlier for the autonomous construction of the railways. However, despite the important and significant financial support of the wealthy Beirut-based Greek Orthodox Sursock family, Shukri Bey and Elias were unable to raise the necessary funds for the railway.⁴⁵ They were forced to sell significant shares to the British entrepreneur John Robert Pilling, which effectively brought the railway into the British orbit, to the chagrin of both Schumacher and Oliphant, who had repeatedly advocated for a multinational structure.⁴⁶ Meeting with the Palestine Exploration Fund’s leaders in London in July 1893, Pilling,

⁴³ Gottlieb Schumacher to George Armstrong, Haifa, May 7, 1889. PEF DA SCHUM.

⁴⁴ Gottlieb Schumacher to George Armstrong, Haifa, August 15, 1892, PEF DA SCHUM.

⁴⁵ See Laurence Oliphant, *Haifa: Life in the Holy Land, 1882–1885* (1887; repr. Jerusalem: Canaan Publishing House, 1976), 78–83.

⁴⁶ *Ibid.*

apparently familiar with and deeply impressed by Schumacher's work, advocated Schumacher's involvement in further incidental work for the railway.⁴⁷

Schumacher came on board but also continued to advocate for multilateral involvement, particularly the participation of the Deutscher Pālastina-Verein. In May 1896, on the eve of construction, Schumacher made a last-ditch effort to have a new survey that was to be conducted between 'Ajlūn and Es Salt be a joint effort by the Palestine Exploration Fund and the Deutscher Pālastina-Verein.⁴⁸ The Palestine Exploration Fund did not sanction this, and until the railway's completion in 1905, Schumacher seemed ultimately resigned to his role as a functionary of British interests, producing impressive reports of topographic, geographic, and archaeological topics of interest in a series of reports issued at least once a year.⁴⁹

Nevertheless, Schumacher's reputation as a German champion of Palestine seems only to have grown during this period. In a report from the American consulate in Beirut entitled "Railways in Syria," Gabriel Bie Ravndal (1865–1950) noted how Schumacher single-handedly convinced all the authorities, financiers, and other engineers of the necessity of a station in Nazareth, perhaps because it was site of interest for templers or German Zionists or both.⁵⁰ Ravndal wrote: "Surveyors deemed it wise to keep away from such irregular ground [around Nazareth], although Doctor Schumacher, United States

⁴⁷ "Memorandum of an Interview between the Palestine Exploration Fund Representatives and Mssrs. Phillips and Pilling," London, July, 1893, PEF DA SCHUM.

⁴⁸ Gottlieb Schumacher to Dr. Thomas Chaplin, Haifa, May 8, 1896, PEF DA SCHUM.

⁴⁹ These appear throughout PEF DA SCHUM.

⁵⁰ Gabriel Bie Ravndal, "Railways in Syria," Beirut, December 28, 1903, Ba R901/15069, 118–20. Regarding Nazareth, see Dan Rabinowitz, *Overlooking Nazareth: The Ethnography of Exclusion in Galilee* (Cambridge: Cambridge University Press, 1997), esp. 3–23.

consular agent at Haifa, a civil engineer, and familiar with Galilee topography as nobody else, favored touching Nazareth.”⁵¹ In the same report, Ravndal attempted to dispel international perceptions of the railway construction (including the neighboring Hejaz Railway) as involving chaotic and primitive operations, noting that under the leadership of Schumacher, the operations “should not be lost sight of by German industry, and this applies also to the English. The undertaking has often been literally ridiculed, yet the Turks labor on the big work with astonishing pertinacity in spite of the innumerable difficulties they encounter.”⁵²

Schumacher also demonstrated a certain pertinacity that was allied to his relentless commitment to know the earth of Palestine, be this in its topographic contours, its archaeology, or, in certain instances, what it evoked on an aesthetic level. While Schumacher’s many studies are adorned with fewer than the average number of illustrations appearing in similar publications of the day, the illustrations he did execute and include nonetheless reveal his bent on the visual qualities of Palestinian topography. Most notably, Schumacher rarely depicted monuments, preferring instead to depict spatial conditions related to earth and building such as the underground vaults at Umm Qais in Jordan [**Fig. 3.53**] and modest natural wonders like the natural rock bridge at Tell el Hamma near Tiberias [**Fig. 3.54**].

Schumacher’s large and unique role in the production of the topographic knowledge of the Ottoman empire may also be understood within a longer historical context bridging the descriptive, often romantic, tone of the nineteenth century with the

⁵¹ Ibid., 16.

⁵² Ibid., 16-7.

technical, ethnographically disinterested imperatives of the expeditions of the twentieth century.

3.6 The Stemrich Expedition of 1899–1900

The first extensive expedition to be executed with a railway concession in hand was the so-called Stemrich Expedition, named after the German consul-general. At the expedition's plenary session, held in the Summer of 1899, a two-part structure was devised involving two groups, one focused on technical aspects of the Konya-Basra route and the other focused on commercial aspects and opportunities.⁵³ Despite the distinct functions of the groups, both included architects, financial specialists, Ottoman “chaperones,” and engineers.⁵⁴ At the plenary session, Siemens stressed that the expedition, to be led by Stemrich, Mackensen, and Kapp von Gülstein, should spare nothing to acquire all of the information necessary for a thorough and detailed report, and that the expedition would be supported accordingly with Deutsche Bank funds.⁵⁵ While the expedition could take as much time as needed, its primary goal was to determine the most expedient route from Konya to Baghdad, largely in terms of topographic conditions but also in reference to issues of security, namely, the presence or absence of political

⁵³ McMurray, *Distant Ties*, 43.

⁵⁴ Ibid. The groups included Ernst Mackensen, Otto Kapp von Gülstein, government architect Habich, Major Morgen, an attaché of the German military, Dr. Aghassian, a bureaucrat of the Anatolian Railway Company's trade armature, and several additional representatives of the Ottoman Ministry of Public Works.

⁵⁵ Ibid. See also Ba 8119f/8113 (FI 28 A-11, Doc. 8). Stemrich received a stipend of 6000 francs, and Mackensen and Kapp von Gülstein 5000 each; NLa Ernst Mackensen Nachlass NL VIII Hs Nr. 64.

unrest and ethnic strife. Both before and after the expedition, the “study commission” from Berlin met to plan and discuss findings, and the minutes from these meetings reveal the primacy of the railway’s economic function, which the technical as well as the commercial aspects were intended to serve.⁵⁶

The expedition, as indicated by the final report,⁵⁷ had the following itinerary:

1899

September

14: Eskişehir

15–18: Konya

19: “Ali Bey Boyuk” (in the vicinity of Alibeyhüyüğü)

20–22: Karaman

23–24: Ereğli

25–27: Niğde

28: Bahçeli

29: Çiftehan

30: “Mezar Uluk Han” (in the vicinity of Gülek)

October

1–6: Adana

7: Mersin

8–10: Adana

11: Hamidiye

12: Osmaniye

13: “Kasanali” (in the vicinity of Bahçe)

14–17: Marash

18: Ded Pascha Han

19–20: Gaziantep

21: Kilis

22–30: Aleppo

31: Çobanbey

November

1–2: Birecik

⁵⁶ See Ba 8119f /8113. One of the metrics repeatedly referenced for ascertaining the relative economic value of the line was the cost and time required to transport a good between Bombay and Brindisi. The expedition also comprised three brigades for security detail, the first for the course of the trace from Ereğli to Adana, the second for the course from Adana to Birecik, and the third for the course from Birecik to Mosul. A fourth brigade was also most certainly provided by the officials in Baghdad. See meeting minutes, Berlin, June 29, 1899, Ba 8119f /8113.

⁵⁷ “Bagdad-Bahn-Projekt. Bericht von der Anatolischen Eisenbahn-Gesellschaft im September 1899 ausgestanden Studienexpedition. Commercieller Theil. Berlin, Mai 100,” Ba 8119f / 8110.

3: Tscharmelik Han
 4–6: Şanlıurfa
 7: “Iridje” (in the vicinity of Viranşehir)
 8: “Suisik” (in the vicinity of Kovali)
 9: Karakuyu
 10–12: Mardin
 13: “Haniki Fok” (in the vicinity of Yukarıkonak)
 14–17: Diyarbakır
 18: “Haniki Fok” (in the vicinity of Yukarıkonak)
 19–20: Mardin
 21: Nusaybin
 22: “Kubur el Bit” (in the vicinity of Al-Qahtaniyah)
 23: Rmaylan Tatani
 24: “Högna” (in the vicinity of Kisik Kupri)
 25–30: Mosul

December

1: “Kanech” (probably Al Khidhir)
 2: “Oibegua” (in the vicinity of Erbil)
 3: Altunkupri
 4–5: Kirkuk
 6: Tawuq
 7: Tuz Khormato
 8: Salahiye
 9: Karatepe
 10: Deli Abbas (just northwest of Miqdadiyah)
 11: Baqubah
 12–30: Baghdad
 31: Tigris River travel

1900

January

1–4: Tigris River travel
 5–12: Basra
 13: Az Zubair
 14: Safwan
 15: “Benije” (between Safwan and Al-Jahra)
 16: Al-Jahra
 17: Kuwait
 18: Al-Jahra
 19: “Benije” (between Safwan and Al-Jahra)
 20: Safwan
 21–22: Az Zubair
 23: Rumelan
 24: “Scheria” (in the vicinity of Al Shafi)
 25: “Chamisia” (in the vicinity of Chibayish)
 26: “Sacharije” (in the vicinity of Suq Al-Shuyukh)
 27: “Hanack” (in the vicinity of Nasiriyah)
 28–29: Samawah
 30: “Tel Dchamije” (in the vicinity of Balad)

31: “Musba” (in the vicinity of Abu Ghraib)

February

1: Najaf

2: “Hamed Han” (in the vicinity of Hillah)

3–4: Karbala

5: “Ischarija” (in the vicinity of Mahmudiyah)

6–7: Fallujah

8: Ramadi

9: Hit

10: “Djuana” (in the vicinity of Al-Baghdadi)

11: “Baritsch” (in the vicinity of Haqlaniyah)

12–14: Anah

15: “Selle” (in the vicinity of Rawa)

16: “Muchella Orsi” (in the vicinity of Al-Qa’im)

17: Salahiye Han

18: Mayadin

19–20: Deir ez-Zor

21: At Tibni

22: “Sapka” (in the vicinity of Ar Raqqa)

23: “Abu Kubeja” (in the vicinity of Al-Thawrah)

24: “Abu Cherrera” (in the vicinity of Dibsi Afnan)

25: Emar (Tell Meskene)

26–28: Aleppo

March

1–15: Aleppo

16: Hamam

17: İskenderun

18–28: Mersin

29–April 5: Return trip to İstanbul

Even in the relatively well-charted (and “clean!”) area around Konya, the expedition team quickly found existing maps and accounts to be inaccurate or outright wrong.⁵⁸ This was frustrating enough, but it was compounded by what Stemrich and other German members of the expedition troupe found to be deliberately falsified information provided by locals. Stemrich noted in September that “the oriental is inclined to disguise his ignorance and will always give some, though often false information.”⁵⁹

⁵⁸ Ibid.

⁵⁹ Ibid.

The dearth of reliable information was troubling, because for the most part the troupe found the region between Konya and Diyarbakır to be one that held tremendous economic potential and, because of the presence of Christians in the area, one that had the distinct possibility of being managed and operated semiautonomously. Beyond Diyarbakır, however, things became more challenging, and the problems were not those presented by the landscape—which in actuality became significantly more manageable. The vilayet, Stemrich observed, was marked by lawlessness and chaos. In just a matter of a few days, the troupe witnessed entire villages burned to the ground and the plundering in broad daylight of commercial caravans that were traveling through.⁶⁰ The problem was not just the local government's lack of oversight, or even interest, in maintaining order in the region, but also the specific threat posed by both the Kurds and the Bedouin tribes and their perceived penchant for violence and destruction and basic hostility to the establishment of permanent social and cultural institutions, such as a railway.⁶¹ The troupe found that Mesopotamia did not have much more order, but they believed that with some strategic interventions, the eroded landscape might be revitalized with agriculture and commercial activity, with Baghdad serving as its hub.

Not long after the expedition's completion, Stemrich issued a report to Siemens that identified an optimal trace for the railway from Konya to Basra, described its topography and economic interest, and predicted that the total construction would take about eight years. The expedition commission divided the 91-page report into five distinct geographic regions that correspond to the Ottoman administrative vilayets. Each

⁶⁰ McMurray, *Distant Ties*, 45–46.

⁶¹ Ba 8119f /8113 (FI 19 D-8, 40).

section appraises the relevant economic and demographic information of the region in question, informed by an introductory description of the physical state of the land in the region and its most important locales. The approach is, for the most part, straightforward and disinterested, but also indicates some unique interpretations of the topography and the people inhabiting it and their activities. The first region, the eastern portion of the vilayet of Konya at the feet of the Taurus Mountains, is described in terms evocative of a romantic painted landscape:

From a considerable distance (20–60 km) the high mountains are covered with picturesque lines. In the south and east there are the various features of the Taurus, in the north and west there are Karadja [sic] and Hassandagh [sic] that accompany them and rise to more than 1000 meters to their side. Then there is the southern sun. It spreads a purple veil over the landscape that gives the sharp lines of [this profile] something soft and gentle, it gives the shadows on the reddish mountains a deep blue color and prepares the eye for strange delusions by transforming the shimmering rock of the mountains into shiny surfaces of snow while a mass of glowing stripes on the horizon further conjure up the image of lakes and bodies of water.⁶²

The area around Niğde is described with similar passion:

It is a mountainous country of outstanding beauty. The Bulgardagh [sic]... offers tantalizing pictures, and from its foothills there are magnificent vistas that open up in the northeast to the high mountains. The picturesque valley of the Tschakit [sic], the river running at its foot along the Gülek [Pass] with the wildness of the rocky outcrops, is not something easily set aside.⁶³

⁶² Ibid., 5. “In beträchtlicher Breite (20-60 km) ist die Ebene zwischen hohen Bergen mit malerischen Linien gelagert. Im Süden und Osten sind es die verschiedenen Züge des Taurus, im Norden und Westen sind es Karadja- und Hassandagh, die sie begleiten und um mehr als 1000 Meter zu ihrer Seite emporsteigen. Dazu kommt die südliche Sonne. Sie breitet einen violetten Schleier über die Landschaft, der den scharfen Linien derselben etwas weiches und Sanftes verleiht, sie gibt den Schatten auf den rötlichen Bergen eine tiefblaue Färbung und sie bereitet dem Auge merkwürdige Täuschungen, indem sie das schimmernde Gestein der Berge in glänzende Schneeflächen verwandelt und indem sie leuchtende Streifen am Horizont erscheinen last, die das Bild ferner Seen und Gewässer hervorzaubern.”

⁶³ Ibid., 5–6. “Es ist ein Gebirgsland von hervorragender Schönheit. Der Bulgardagh, der seine Steinmassen nach Norden in kühnem Wurf emporhürmt, bietet köstliche Bilder, und von seinen Vorbergen eröffnen sich prächtige Ausblicke in das nordöstlich liegende Hochgebirge. Das malerische Thal des Tschakit, Flusses zieht sich an seinem Fuss entlang und zu dem beim Gülek Boghas belegenen Passe hinüber dem mit Bezug auf Wildheit der Felspartien nicht leicht etwas zur Seite zu stellen ist.”

The commission notes poverty but also the (by now famous) fecundity of the region's soil. Their favorite location is Karaman, which they describe as a "friendly little city."⁶⁴

The second region is the vilayet of Adana, a region that stirs a mix of emotions with its rough terrain, on the one hand, and its significant economic livelihood on the other. They note:

The vilayet is rich in scenic beauty. The plain of Adana makes a lush impression; the three rivers, the Tarsus Tchay [sic], the Seihun [sic] and Djihan [sic] (Cydnus, Sarus and Pyramus), flow through it and [the city] is surrounded by the Taurus and Amanus in a semicircle. The settlement Missis is delightful, situated on a hill with a picturesque bridge over the Djihan [sic] and the medieval Han constructions across the river. A fabulous spectacle is offered by the Yilankale, the snake castle, built on steep cliffs with its crenulated walls and towers that bind the various myths of the area (at Hamidié) it dominated. In particular, [it] recounts [when] the Ghiaurdagh [sic] (Amanus) were not [thought of] as inferior in magnificence, with its rocks and its wooded slopes and a host of splendid spots.⁶⁵

The third region is the vilayet of Aleppo, described as a place of immense variety, spanning from the Mediterranean outlet at İskenderun to the landscapes of the Euphrates:

Geographically, the vilayet has some noteworthy points. These included, above all, the Gulf of Alexandretta, whose rounded profile is surrounded by a wreath of fertile land. Behind the lower heights, to the west of the Gulf, rise the mighty masses of the Taurus [mountains], while the Amanus [mountains] rise in the east. The play of lines is beautiful, how incomparably the colors shine, the blue sea, the dark tone of the country and the snow the mountains bring forth. When the setting sun at last bathes the countryside in a golden and blood-red glow, it is an overwhelming spectacle. Among the points worth further notice are some parts on the Euphrates, such as the graceful plane [at] Biredjik

⁶⁴ Ibid., 6.

⁶⁵ Ibid., 13–14. "Das Vilajet ist reich an landschaftlicher Schönheit. Einen üppigen Eindruck macht die Tiefebene von Adana, die von drei Flüssen, dem Tarsus Tchay, dem Seihun und Djihan (Kydnos, Sarus und Pyramus), durchströmt und von dem Taurus und Amanus im Halbkreis umrahmt wird. Reizvoll ist das auf einem Hügel gelegene Missis mit der malerischen Brücke über den Djihan und den mittelalterlichen Hanbauten jenseits des Flusses. Einen märchenhaften Anblick gewährt mit seinen crenelirten [sic] Mauern und Thürmen Yilankale, das Schlangenschloss, an das sich mancherlei Sagen knüpfen und das (bei Hamidié) auf steilen Felsen erbaut, weithin die Gegend beherrscht. Namentlich aber bietet der Ghiaurdagh (Amanus), wenn er auch an Grossartigkeit dem Taurus nachsteht, mit seinem Felsgestein und seinen baumbewachsenen Hängen eine Fülle prächtiger Punkte."

[sic], which is traversed by the [river] current in a wide arc and framed by picturesque mountains.⁶⁶

The commission is particularly taken by the city of Aleppo, describing its topography and built environment in detail:

The houses of the city are usually built of blocks, the streets are narrow, but well-paved, and there is a cleanliness that is truly enjoyable. In some parts of the city, however, there is the decay and neglect of the ages, but on the other hand, this makes [the city's] lively relations with Europe [even more] noticeable. In the north of Aleppo, a part of the town has been created that is built entirely *alla franca* and inhabited by Europeans and Levantines. In the surroundings of the city are rich plantations, operating extensive [facilities] for the cultivation of oil and fruit.⁶⁷

The fourth region, the vilayet of Diyarbakır, is portrayed as a relatively easy land to penetrate but also one without very much for the eye nor any great potential for economic enrichment:

[Although] the vilayet Diarbekir [sic] may offer some great beauties in the north—the sources of the Tigris in the unending mountains, a land sought and studied by the commission, it can hardly be counted among the most outstanding scenic landscapes. The view from Mardin to the Karadjadagh [sic] and the surrounding mountains is spectacular, with its classic character and [image of where] the Tigris flows through the hills of Diarbekir [sic], [unperturbed] by the snowy mountains of Kurdistan; however, by and large, the landscape is single-faceted and tedious in its uniformity.⁶⁸

⁶⁶ Ibid., 23. “Landschaftlich hat das Vilajet manche bemerkswerthe Punkte. Dahin gehört vor allem der Golf von Alexandrette, der in seiner weiten fast regelmässigen Rundung von einem Kranz fruchtbaren Landes umgeben ist. Hinter den niederen Höhen, die im Westen den Golf umziehen, erhebt sich in mächtigen Massen der Taurus, während im Osten der Amanus emporsteigt. Schön ist das Spiel der Linien, unvergleichlich aber der Farbenglanz, den das Blau des Meeres, der dunkle Ton des Landes und der Schnee der Berge hervorbringen. Wenn die untergehende Sonne die Landschaft in goldige und zuletzt in blutrothe Gluth taucht, so ist es überwältigendes Schauspiel. Zu den bemerkenswerthen Punkten gehören weiter manche Partien am Euphrat, wie die anmuthige Ebene Biredjik gegenüber, die vom Strom in weitem Bogen durchzogen und von malerischen Bergen umrahmt wird.”

⁶⁷ Ibid. “Die Häuser der Stadt sind meist aus Quadern gebaut, die Strassen sind eng, aber gut gepflastert, und es herrscht eine Sauberkeit, die angenehm auffällt. In einzelnen Theilen der Stadt tritt allerdings Verfall und Verwahrlosung zu Tage, andererseits aber machen sich auch die lebhaften Beziehungen zu Europa bemerklich. Im Norden Aleppos ist ein Stadttheil entstanden, der ganz *alla franca* gebaut ist und der von Europäern und Levantinern bewohnt wird. In der Umgebung der Stadt sind reiche Pflanzungen, es wird ausgedehnte... Obstzucht betrieben.”

⁶⁸ Ibid., 33. “Das Vilajet Diarbekir mag in den im Norden die Quellen des Tigris umschliessenden Bergen grosse Schönheiten bieten; wer dagegen das Land auf dem von der Kommission verfolgten Wege durchwandert, wird es schwerlich zu den landschaftlich hervorragenden

The commission's final section, concerning the vilayets of Baghdad and Basra, summarizes the region envisioned as the railway's terminus:

The vilayets of Bagdad [sic] and Basra may enclose the area in which the paradise is laid, but they cannot boast that scenic beauty in return. The country, as far as the Commission has learned, is almost entirely flat, has the character of the desert, which [turns to] gravel, swamp, and then [again] to a sand or salt desert. The dunes are of an imposing width, but only here and there do their banks proffer attractive images. The only attraction likely lies in the palm forests, which occur in the Diala [sic] region.... Within the vegetable and grain fields, with the orange and the pomegranate trees that thrive in its shadows, the splendor and wealth that the country can elicit under favorable circumstances is on view and, [alongside] the boundless dunes, they give the landscape a stamp of serious and distinguished beauty—[those] who [have] considered the country with the view of the historical connoisseur like to conjure up images of rich cultures and lush gardens, but these are images that belong to the past and have little in common with the present.⁶⁹

The official documentary maps of the trace that were eventually produced by the Army's cartography division are dated in Ereğli (home to the main frontier field office of the Baghdad Railway before the establishment of the camp at Belededik) in 1909, and comprise the following:

1. Overview plans (1:200,000) and profiles (L. 1:200,000, H. 1:10,000)
 - a. Konya-Adana.
 - b. Adana-Euphrates River.
 - c. Euphrates River-Mardin.

rechnen. Grossartig ist der Blick von Mardin auf den Karadjadagh und die umliegenden Berge, von klassischem Charakter ist das vom Tigris durchströmte Hügelland von Diarbekir, das von den schneebedeckten Bergen Kurdistans unrahmt wird – im Grossen und Ganzen ist die Landschaft aber einförmig und in ihrer Gleichmässigkeit ermüdend.”

⁶⁹ Ibid., 52–53. “Den Vilajets Bagdad und Bassra, obschon sie die Gegend umschliessen, in welche das Paradies verlegt wird, kann landschaftliche Schönheit nicht nachgerühmt werden. Das Land, soweit die Kommission es kennen gelernt hat, ist fast durchgehends flach und in weitaus dem grössten Theils hat es den Charakter der Wüste, die sich bald als Kies-, bald als Sumpf-, bald als Sand- oder als Salzwüste darstellt. Die Ströme sind von imposanter Breite, aber nur hier und da bieten ihre Ufer anziehende Bilder. Fast der einzige Reiz besteht in den Palmenwäldern, welche bereits im Diala-Gebiet vorkommen... Mit den Gemüse- und Getreidefeldern, mit den Orangen- und den Granatbäumen, die in ihrem Schatten gedeihen, zeigen sie, welche Pracht und Fülle das Land unter günstigen Umständen zu entfallen vermag, und, die Ströme umrahmend, geben sie der Landschaft das Gepräge ernster und vornehmehmer Schönheit – Wer das Land mit dem Blick des Geschichtskenners betrachtet, mag sich Bilder von reichen Kulturen und üppigen Gärten vor Augen rufen, aber es sind Bilder, die der Vergangenheit angehören und die mit der Gegenwart wenig gemein haben.”

- d. Mardin-Mosul.
 - e. Mosul-Bagdad.
 - f. Bagdad-Basra.
 - g. Basra-Kasima [Persian Gulf].
2. Topographic plans (1:200,000)
 - a. Hamidiye-Viranşehir.
 - b. Osmaniye-Kilis.
 - c. Şanlıurfa -Mardin.
3. Composite map comprising:
 - a. Topographic sketches (1:100,000) of the route between Hamidiye, İskenderun, Birecik, Şanlıurfa, and Mardin.
 - b. Sketch of a Euphrates railway from Baghdad to Aleppo (1:200,000).
4. Tachymetric plans (1:10,000)
 - a. The Çakıt Pass and corresponding trace profiles.
 - b. Arablar-Adana and corresponding trace profiles.
5. Tachymetric plans (1:10,000)
 - a. Arabli-Kasanali-İslahiye and corresponding trace profiles.
 - b. İslahiye-Ragun-Katma and corresponding trace profiles.
 - c. Katma-Beiramhan and corresponding trace profiles.
6. Tachymetric plans (1:10,000)
 - a. İskenderun-Beilan-Sonsku and corresponding trace profiles.
 - b. İskenderun with port bearings.
7. Tachymetric plans (1:10,000)
 - a. Adana-Arabli-Ceyhan-Marash.
 - b. Marash-Mülk.
 - c. Marash-Alcı.
8. Corresponding trace profiles for #7.⁷⁰

These expedition maps, Mackensen noted, were the first major step in transitioning the Ottoman government away from thinking of the topography of its provinces in “hours and horses” and toward a rational tachymetric system of kilometers, slopes, and topographic contours.⁷¹ The maps also charted something new: the petroleum of

⁷⁰ Ba 8119f/8109 (13). Translations of the document titles are mine.

⁷¹ Vice Consul Doughty Wylie to Mr. G. Barclay, Konya, July 1, 1908, NA FO 406/33, 79.

Mesopotamia, which became an ever more crucial geopolitical aspect of the railway's reach to Baghdad.⁷²

In surveying the vast amount of land lying between Konya and Baghdad, the cartographers used the notational and representational mapping systems of the Anatolian Railway Company as their template, as is evident in a comparison of the *Lagepläne* (surveyors' plans) and *Lageprofile* (surveyors' topographic sections) of the two projects.⁷³

The *Lagepläne* are constructed like a book that can be extended out into a long linear strip. The long drawings contain six layers of information, stacked vertically. The uppermost layer depicts a sectional cut through the projected trace of the line from one given terminus to another. The actual elevation of the track is drawn as a darker line that hovers slightly above the contour line at a more even grade. Occasionally, the thick line of the railway trace incises the contour line. These notations denote whether the railway bed is above the earth's surface, and is thus atop an earthwork and ballast, or slightly below it, as in a tunnel, a trench, or a defilé. Above this line and written sideways, four notations appear: "Pont" (bridge), "Syphon" (siphon), and by far the two most common, "Aq." (aqueduct) and "P á N" ([meaning unclear]), each followed by a number denoting

⁷² See mention of the Stemrich expedition's role in petroleum speculation and the British suspicion around it in "The Petroleum Fields of Mesopotamia," *The Petroleum Review* (October 15, 1904). See also Dietrich Eichholts, *Die Bagdadbahn, Mesopotamien und die deutsche Ölpolitik bis 1918: Aufhaltsamer Übergang ins Erdölzeitalter mit Dokumenten* (Leipzig: Leipzig Universitätsverlag GmbH, 2007).

⁷³ The author has obtained every map that was produced. The maps were found primarily in the Deutsche Bank archives but also in the Bundesarchiv (Lichterfelde) and Başbakanlık Osmanlı Arşivi. Their complete inclusion and explication is not necessary here, and the provision of the full set of maps as an appendix would be too cumbersome, but the author would be glad to provide them to anyone who is interested. The few excerpts that follow indicate key moments and reveal the general graphic style referred to in the text.

the sequence and/or location within the overall kilometeric sequence. The “P á N” notations are further emphasized by a graphic of a flag, extending upward from the railbed line. When the elevation of the topographic contour line is about to extend above or below the paper, the line is interrupted and begun anew immediately below or above where the line was cut.

Below this topographic sequence and occasionally above it, a second layer of information about the railway stations themselves is embedded. At the precise middle point of the railway station building, a dashed line is extruded downward or upward, ending at a diagrammatic, thumbnail plan of the station in a larger scale with its particular planar arrangement. Written above the diagrammatic plan is the station’s name and beneath that its class type. The continuous railway track is typically the bottommost line, from which branch lines that are useful for various purposes—stopping, switching directions, loading and unloading goods, etc.—are shown. The station is diagrammed in the plan as a solid shaded block, as are all other buildings with a function directly relevant to railway operations: storehouses, depots, workshops, offices, toilet facilities, etc. Worker housing and commercial facilities built in tandem with the station’s campus, however, are not pictured.

Below this, a compact set of parallel lines present additional layers of information. The uppermost of these lines marks the railway’s elevation above sea level at irregular intervals through a thin light line extending downward from the contour. Below this is a simple regular demarcation of distance, with kilometer 0 at the center of Konya station and proceeding in one-kilometer intervals from there onward. Beneath, the grade is measured and parceled into blocks of grade changes, measured in meters. For

example, if the railway remains at a 0-degree grade for 750 meters, “0/750” is written within the block with a straight horizontal line between “0” and “750.” If the grade is 7 degrees upward for 300 meters, then the line in the notation “7/300” separating the “7” and “300” itself has an approximately 7-degree upward grade. This applies similarly to downward grades. Finally, below this, a line demarcates the earthwork construction necessary to keep the railway trace at its projected grade. Where earthworks above ground are necessary, a small hump and its width are projected upward from a straight line. Where earth excavation is required, depressions are drawn into the same straight line.

The *Lagepläne* follow a similar format to von Pressel’s winding maps, although within the Deutsche Bank archives there are also versions that simply have triangular-shaped voids where sections of the winding map would normally bend, so as to maintain a format in the shape of a continuous rectangle—which allows the railway trace to remain more or less at the center of the long unfolding sections of the booklet. Generally, sketches of the topographic contours of the railway environs are drawn to roughly 1.5 kilometers from each side of the railway trace. As with the *Lageprofile*, every full kilometer is notated and every bridge and culvert is marked. Additionally, villages and overland roads, mostly linking these villages, are also marked. Larger cities are marked as shaded blocks, and in Irak, a special system of notating oases emerges along the Tigris, where sections are marked with fields of small graphic palm trees.

The maps of Mesopotamia produced from the information gathered on the Stemrich expedition include a number of unusual features. North of Baghdad, for example, the map notes the domiciles of several important *effendis* along the eastern bank

of the Tigris [Fig. 3.55]. Several instances of *ruines* (ruins) are noted in the distance beyond the railway trace, but none as densely as in the region around Samarra [Fig. 3.56], which appears to have been quite intensively surveyed. The ruins in and around Samarra, which account for the most significant documentation of sites on the railway maps that are unrelated to the railways themselves, are noted as follows: “Serpentine-Minaret” (the Malqiya minaret), “Ruines (Eski Bagdad)” (ruins of the old city), “Ruines du Chateau des Chalifs” (ruins of the caliph’s palace), “Ruines anc. Bagdad” (ruins of ancient Baghdad), “Ruines (temple)” (temple ruins), “Anc. Poste” (ancient post or station), “Ruines d’Istamboulate” (ruins of the İstanbulate; presumably an imperial outpost), “Ruines de Koutsya” ([meaning unclear]), and “Tombeau du Cheikh Mohamed” (Tomb of Sheikh Mohamed).

The report of the Stemrich commission and the maps ultimately produced from its findings form an example of topographic knowledge *par excellence*. The report not only facilitated the eventual construction of the most challenging portion of the Ottoman railway network, but also charted its environs demographically, economically, and, in the cases where petroleum and archaeological ruins were respectively notated, geopolitically and culturally. The result was a dramatic advancement over the earlier forms of topographic knowledge, one based primarily on the linear elements of contour lines and projected railway paths. In “filling in” the topographic picture, so to speak, with the volumetric information about culture and natural resources, the expedition more closely approximated a scientific colonial endeavor, colonial in the sense of both what it provided for testing the economic interests of Deutsche Bank and the Kaiser’s political

aspirations and also what it did for the Sultan's wish to have a railway to assist in taming the Ottoman outback.

3.7 The Karl Auler Expeditions of the Hejaz in 1904 and 1907

Early in 1904, Abdülhamid commissioned an expedition for the study of the Hejaz railway line as it had been proposed by Meißner.⁷⁴ Although nominally under the direction of Turkhan Pasha, the expedition was primarily led by Karl Auler, known in Ottoman circles as “Auler Pasha” with the title “Kais. Osman. Divisionsgeneral, Königl. Preuß. Oberst z.D.” (Imperial Ottoman Division General, Royal Prussian Colonel). The expedition was divided into two main subdivisions: the Damascus-Ma'an route, including the branch line to Haifa, and the second portion, from Ma'an to Al- 'Ula.⁷⁵ The reports, published in 1906 and 1908, respectively, were issued as special editions of *Petermanns Mitteilungen*, a geographic journal published by Justus Perthes. The volumes contain maps [Figs. 3.57-3.58] and also—because the reports were written in the midst of the railway's construction—both topographic notes and accounts of the construction process

⁷⁴ Karl Auler (“Pasha”), “Die Hedschasbahn auf Grund einer Besichtigungsreise und nach amtlichen Quellen, Teil 1,” in *Dr. A. Petermanns Mitteilungen aus Justus Perthes' Geographischer Anstalt* 154 (1906), SPG / Universität Erfurt Signatur SPA 4° 000099; Karl Auler (“Pasha”), “Die Hedschasbahn auf Grund einer Besichtigungsreise und nach amtlichen Quellen, Teil 2,” in *Dr. A. Petermanns Mitteilungen aus Justus Perthes' Geographischer Anstalt* 161 (1908), SPG / Universität Erfurt Signatur 4° 000099. According to Landau, the first route map is preserved in a manuscript in the sultan's collections at the Library of İstanbul University, item no. 93423, which the author was unable to access. See Landau, *The Hejaz Railway and the Muslim Pilgrimage*, 15n26. The orientalist Martin Hartmann also mapped and described the route either near or upon the railway's completion. See Martin Hartmann, “Die Mekkabahn,” *Orientalistische Literatur-Zeitung* 11 (Berlin, January 15, 1908), 1-7. Hartmann fervently warned the Sultan of the severe dangers to the railway posed by Pan-Arab sentiments.

⁷⁵ By this time, it was decided that the railway should not proceed all the way to Medina, which is why Medina was not included.

itself, making these unique among the genre. While Auler made a point of acknowledging the project's two most important figures, General İzzet Pasha (1864–1937) and Meißner,⁷⁶ it was none other than von der Goltz who wrote the study's introduction. This actually makes sense, as the majority of Auler's assistance came from the Ottoman troops trained under von der Goltz's new military regime. Of the publication, von der Goltz noted:

It provides an introduction to the hitherto little known or completely unknown areas of the East Jordan country, the Hejaz and central Arabia, which are equally interesting from geographical, ethnographic, archaeological and historical points of view, and the still rich [information] researchers are to provide. There are especially many important insights into the oldest Semitic culture and its history to be garnered through the train, which by the end of last year had already reached Mudewwere [sic].⁷⁷

Von der Goltz also noted the importance the study held not only for its knowledge about a historical topography but also its knowledge about contemporary life. Here he waxed lyrical about the greatness of the Turkish race (and, of course, his Highness the Sultan):

But no less captivating is the insight into modern Turkish life afforded here. It clearly shows the history of the Hejaz Railway and the remarkable talent of the Ottoman race in their endeavors, their viability having been so often underestimated in Europe. It often elicited my astonishment, when I was still active in the Orient, how the most difficult tasks could be started with rather insufficient funds yet ultimately resolved contrary to all expectations through the good will, adaptability, and naive toughness [of the Turk] that renders every obstacle easy in the end.⁷⁸

⁷⁶ Karl Auler ("Pasha"), "Die Hedschasbahn, Teil 1," iii-iv.

⁷⁷ Ibid., 2. "Sie gewährt eine erste Einführung in die bisher nur wenig bekannten oder ganz unbekannten Gebiete der Ost-Jordanländer, des Hedschas und des zentralen Arabien, die vom geographischen, ethnographischen, archäologischen und historischen Standpunkt aus gleich interessant sind und dem Forscher noch manche reiche Fundgrube in Aussicht stellen. Zumal über die älteste semitische Kultur und Geschichte werden zahlreiche wichtige Aufschlüsse zu gewinnen sein, sobald die Bahn, die Ende vorigen Jahres schon bis Mudewwere."

⁷⁸ Ibid., 2–3. "Aber nicht minder fesselnd ist der Einblick in modernes türkisches Leben, den man dabei gewinnt. Deutlich zeigt die Entstehungsgeschichte der Hedschasbahn die auffallende Begabung der osmanischen Rasse in Improvisationen und damit auch ihre in Europa so vielfach unterschätzte Lebensfähigkeit. Oft hat es mein Staunen erregt, als ich noch im Orient tätig war, wie schwierige Aufgaben mit ganz ungenügenden Mitteln begonnen wurden, aber wider allem Erwarten durch guten Willen, Anpassungsvermögen und eine naive Zähigkeit, die jedes Hindernis leicht nimmt, doch am Ende gelöst wurden."

Concerning the upper Hejaz, Auler described the topography and its relative advantages and disadvantages for the construction of the railway:

The geological structure of the Hejaz and Transjordan is relatively simple. Granite and gneiss form toward the ground floor of the mountain base on the coast of the Red Sea to the Dead Sea. On this a very tough brownish-red sandstone, Nubian sandstone, is supported. It is overlaid with ... cretaceous limestone, which is interspersed with rich [amounts of] flint and chalk marl.⁷⁹

The relative simplicity of the geological landscape belied several of its considerable challenges. Auler noted:

As soon as you are on the road from Damascus to Ma'an, the plain of Damascus erupts into large craters on either side of the railway. On the first track of the network—Der'a [sic]—the decomposition of rocks formed by lava produces a loose red-brown humus rock of great fertility that cultivates mainly cereal and maize. The semi-transparent wheat, which is drawn from these grounds, is of excellent quality. A lot of it is exported. The whole Haurân plain enjoys this excellent land, which can be found even up until the hill country of the 'Ajlûn.⁸⁰

South of Daara, however, the humus and the outcroppings become common enough for Auler to deem any significant development impossible, thus demarcating the zone of economic productivity along a north-south divide.⁸¹ The description of flora and fauna typically follows notes on topography and geology. The variations along the way, and their relative significance to the railways, are evident in one such section from Jordan:

⁷⁹ Ibid., 6. "Der geologische Aufbau des Hedschas und Ostjordanlandes ist verhältnismäßig einfach. Granit und Gneis bilden den Grundstock des Gebirgzuges an der Küste des Roten Meeres bis zum Toten Meere hin. Auf diesen Urgesteinen lagert ein sehr harter braunroter Sandstein, nubischer Sandstein. Es ist mit einedem der untersten Kreideformation angehörenden Kreidekalk überlagert, welcher mit Feuersteinen und Kreidemergel reich durchsetzt ist."

⁸⁰ Ibid., 6–7. "Sobald man auf dem Wege von Damaskus nach Ma'an die Ebene von Damaskus hinter sich hat, zeigen sich zu beiden Seiten der Bahnlinie die Eruptionskrater in großer Zahl. Auf der ersten Strecke der Bahn – etwa bis Der'a – haben die Zersetzungsprodukte der Lava einen lockeren rotbraunen Humus von großer Fruchtbarkeit gebildet, welcher hauptsächlich mit Getreide und Mais angebaut ist. Der halbdurchsichtige Weizen, welcher hier gezogen wird, ist von hervorragender Güte. Ein großer Teil davon wird exportiert. Die ganze Haurânebene erfreut sich dieses vortrefflichen Bodens, der noch bis in das Bergland Adschlûn hinein zu finden ist."

⁸¹ Ibid., 7.

A veritable forest does not exist, only on the slopes of the ‘Ajlun [sic] mountains is there a cover of low oak and scrub. Southern vegetation, particularly palms and pomegranate trees, can be found in East Jordan near the homes and in the oasis-like wadis. Between Ma’an and Medina, the ceaseless desert area, such oases are rare. The most important are Teima [sic] and Khaybar [sic]. From Medina, the vegetation becomes better, particularly in the area supported by tropical rain around Mecca where flora flourishes.⁸²

Auler also charted the local reaction to the railway and its construction:

I need hardly add that the Fellahs, Muslims and Christians, are happy to welcome the railway construction. They will indeed extract the greatest benefit from it because they can use their grain [more effectively] now. The vividness with which they expressed their joy will remain unforgettable to me. As the men incessantly repeated a salutation in unanimous chorus: “Allah jansûr sultânenâ” (May God give victory to our Sultan!) there was an accompaniment of rhythmic clapping of hands [while] the women, with their characteristic high shrills, produced strong pigeon-like cooing sounds in the highest treble.⁸³

Auler committed a significant chapter (section 8) to the perceived challenges of the railway, including the provision of water, the provision of fuel, the overcoming of drift sand, and the question of labor. For each challenge, Auler outlined a set of creative solutions, several of which are design solutions, from the construction of wells to makeshift barriers for sand drifts. Topographic descriptions occur with even greater frequency in the second volume, interwoven with further remedies for the above challenges. Water—or the lack thereof—is a perpetual theme, and it inflects the

⁸² Ibid. “Ein regelrechter Wald ist nicht vorhanden; nur die Hänge der Adschlûnberge sind mit niedrigem Eichenholz und Gestrüpp bestanden. Südliche Vegetation, besonders Palmen und Granatbäume, findet sich im Ostjordanlande in der Nähe der Wohnstätten und in den oasenartigen Wadis. Zwischen Ma’ân und Medina, dem ausgesprochenen Wüstengebiet, sind solche Oasen selten. Die bedeutendsten sind Têimâ und Châibâr. Von Medina ab wird die Vegetation wieder besser, und besonders in der Umgebung von Mekka unterstützen tropische Regen das Gedeihen der Flora.”

⁸³ Ibid., 10. “Ich brauche kaum hinzuzufügen, daß auch die Fellahen, Mohammedaner wie Christen, den Bahnbau sehr freudig begrüßten. Sie ziehen ja auch den größten Vorteil daraus, da sie ihr Getreide nunmehr besser verwerten können. Die Lebhaftigkeit, mit welcher sie ihrer Freude Ausdruck gaben, wird mir unvergeßlich bleiben. Während die Männer in einstimmigen Chore unausgesetzt ein Ruf wiederholten: ‘Allah jansûr sultânenâ’ und diesen Ruf mit einem rhythmischen Händeklatschen begleiteten stießen die Frauen mit der Kopfstimme den charakteristischen hohen Triller aus, der sich wie ein starkes Girren der Tauben im höchsten Diskant anhört.”

discussion of the Hejaz's topography in every regard, explaining not only the relative difficulty of traversing the region as a pilgrim or an engineer but also the scant and scrappy nature of the vegetation in the Hejaz:

The vegetation in the wadis is far better than is usually supposed. Especially after rain [it] germinates and every nook and cranny sprouts under the influence of the warm sun, which generates temperatures in the winter up to 25° and 28° Celsius. Only rarely does the thermometer drop down to between 2° and 3° Celsius. Yet especially in those places where strong and persistent rains have come down during the winter, flowers [emerge] into the late summer. Thus, even by the end of August 1907, when I rode the Hejaz Railway, a large part of the wadis were bedecked in fresh green despite the glowing burn of the sun. However, the vegetation was not a uniform green surface, as we are accustomed to see in our meadows, but rather conjoined in tufts of grasses, shrubs and trees, interrupted by strips and patches of sand of various sizes.⁸⁴

Auler goes on to contextualize the issue of the flora in terms relative to Europe, noting:

The reason for this relatively lush flora is mainly that the desert plants are much tougher and more resilient than those of our latitudes. Among them, and of particular note, is the salt cedar tree, from the Tamarix family, which develops from small shrubs into medium and large shady trees with broad crowns populating the wadis regularly throughout their course, as if artificially planted. But this is entirely not the case, since only the Bedouin enters the wadis to pitch his camp alongside the salt cedar, which interests him only insofar as it provides shadow and possibly rods for his tent and fuel [for his fire].⁸⁵

⁸⁴ Ibid., 9. "Die Vegetation in den Wadis ist weit besser, als man gewöhnlich annimmt. Besonders nach einem Regen keimt und sprißt es an allen Ecken und Enden unter dem Einfluß der warmen Sonne, die auch im Winter Temperaturen bis zu +25° und 28° C erzeugt. Nur selten sinkt das Thermometer auf +2° bis 3° C herab. Besonders aber an solchen Stellen, wo während des Winters starke nachhaltige Regen niedergegangen sind, blüht und grünt es noch im Spätsommer. So war noch Ende August 1907, als ich die Hedschasbahn befuhr, ein großer Teil der Wadis mit frischem Grün bedeckt, trotz des glühenden Sonnenbrandes. Die Bewachsung bildete allerdings keine einheitliche grüne Fläche, wie wir sie in unseren Wiesen zu sehen gewohnt sind, sondern sie trat gruppenförmig in Büscheln von Gräsern, Sträuchern und Bäumen auf, die durch mehr oder minder breite Sandstreifen und -fleckchen unterbrochen waren."

⁸⁵ Ibid. "Der Grund für diese verhältnismäßig üppige Flora liegt hauptsächlich darin, daß die Wüstenpflanzen sehr viel härter und widerstandsfähiger sind als diejenigen unserer Breiten. Unter ihnen ist besonders zu nennen der Ethilbaum, aus der Familie der Tamarisken, der sich von kleinen Sträuchern bis zu mittelgroßen, schattenspendenden Bäumen mit breiter Krone entwickelt und einzelne Wadis in ihrem ganzen Lauf mit einer Regelmäßigkeit begleitet, als ob er künstlich gepflanzt wäre. Das ist aber ganz ausgeschlossen, da nur der Beduine in jenen Wadis sein Lager aufschlägt und an dem Ethilbaum nur so weit Interesse hat, als er ihm Schatten spendet und allenfalls noch Stangenmaterial für seine Zelte und Brennmaterial liefert."

With vegetation comes, in most cases, an uptick in the prevalence of animal life, which is explained in the context of safety or danger, with the clear conclusion that animals and humans are (with the possible exception of the camel) not complementary in the Hejaz:

[Animal] predators include: the hyena, the jackal, the panther, the fox, eagles and vultures. They are the faithful companions of the pilgrim caravans, which they tend to follow at a certain distance in order to satiate their hunger with the corpses of the desert, fallen victims [including] camels and unfortunate pilgrims, the latter available only for a short time, of course, [before] being wrapped in a shroud and covered beneath a small layer of sand and some stones like all graves next to the pilgrim road. As far as reptiles go, there are snakes, which are especially numerous in the rocks of Madain Saalih [sic], as well as lizards and tortoises. The lizard is of a particularly large size, and is called “Dabb” by the Bedouins. It is up to 90 cm long and has a broad, flat body and long tail. While the body is bedecked with a snake[like] skin, the tail has a bony plate of armor [and] rings. The Bedouin appreciates this animal as a delicacy because of its sweet flesh. As Euting noted, the skin of the animal is used as a tube for storage of butter on their migrations.⁸⁶

A particularly problematic predator for the railway and its wooden telegraph poles and sleepers came from an unexpected source:

One common [predator] in the wood of the telegraph poles is the termite, a dangerous insect whose traces may be visibly found externally on the poles. They gnaw into the wood and undermine the telegraph pole’s integrity over time until it is completely destroyed.⁸⁷

⁸⁶ Ibid., 10–11. “An Raubtieren sind zu nennen: die Hyäne, der Schakal, Panther, Fuchs, Adler und Geier. Sie sind die treuen Begleiter der Pilgerkarawanen, denen sie in einer gewissen Entfernung zu folgen pflegen, um ihren Hunger an den Leichnamen der Wüste zum Opfer fallenden Kamele und armen Pilger zu stillen, welch letztere, wegen der kurzen zur Verfügung stehenden Zeit, naturgemäß nur in ein Leichentuch gehüllt, in flachen, mit einer geringen Sandschicht und einigen Steinen bedeckten Gräbern neben der Pilgerstrasse. An Reptilen gibt es Schlangen, besonders zahlreich in den Felsen von Medâin Sâlih, sowie Eidechsen und Landschildkröten. Die Eidechse kommt in einer besonders großen Form vor, welche von den Beduinen mit ‘dabb’ bezeichnet wird. Letztere wird bis zu 90 cm lang, hat einen breiten, flachen Körper und langen Schwanz. Während der Körper mit Schlangenhaut bedeckt ist, hat der Schwanz eine Panzerung aus Knochenplattenringen. Die Beduinen schätzen dieses Tier wegen seines süßen Fleisches als Leckerbissen. Wie Euting erzählt, verwenden sie die Schlangenhaut des Tieres auch als Schlauch zur Aufbewahrung von Butter auf ihren Wanderungen.”

⁸⁷ Ibid., 11. “Ein häufig vorkommendes und dem Holz der Telegraphenstangen gefährlich werdendes Insekt ist die Termite, deren Spuren an vielen Stangen auch äußerlich, selbst vom Zuge aus, sichtbar waren. Sie nagen Gänge in das Holz und höhlen die Telegraphenstange mit der Zeit aus, so daß sie vollständig zerstört wird.”

The volumes also include a fascinating assortment of images, several of which appear to have run simultaneously in *Servet-i Fünun*. The images depict an array of topics, from construction sites to archaeological finds to landscape appraisal. Common to virtually all of the images is the role of the vista. The horizon line is typically almost central to the vertical dimension of the photograph, lending an environmental continuity and a continuous evocation of the flat desert landscape across the photographs, despite their varied topical themes.

Auler's study has few images of towns or villages, but a notable exception is an image of Ma'an [Fig. 3.59]. The image depicts a quintessential Hejaz village with the wadi on the perimeter where local men stop and allow their horses to take a drink. In the background, one can see the tightly packed city with its monotone stone and clay construction. Another image shows a medallion ceremony at Daara [Fig. 3.60]. As Auler proceeds to the barren landscape of the southern Hejaz in the second volume, the images depict a moonlike, almost surreal landscape of rocks, craters, and jagged sandstone formations [Fig. 3.61]. In certain instances, the rock formations were captured by getting off the railway itself and including a person or two in the image frame for scale [Fig. 3.62]. A rare example of an image of a cultural site of interest is a tomb of Al-Hijr in Meda'in Saleh [Fig. 3.63]. Just outside of Meda'in Saleh, the vegetation shrubs Auler mentions are captured from a moving train [Fig. 3.64]. Auler also depicts the rare palm forests, here shown with a path penetrating a thicket of trees a bit north of Medina [Fig. 3.65]. Bedouins, who Auler notes are loath to have their photograph taken, are also captured in a rare candid shot outside of Medina [Fig. 3.66].

Auler's studies of the Hejaz environment represent the full fruition of the genre of German topographic exegeses leading up to and supporting the German construction of the Ottoman railway network. Here, it is carried through to its full potential—as a tome of practical utility for the construction and dominance of the land it traversed as well as part of a greater corpus of topographic knowledge of one of the Ottoman empire's least charted corners.

3.8 Land, Water, and British Competition, 1905–1910

The development of German topographic knowledge of Mesopotamia became a major theme in the British press and government sources after the turn of the twentieth century. The slow creeping of German engineers and archaeologists into the region around and south of Baghdad symbolized more than anything a threat to Britain's longstanding stronghold of influence in the Ottoman outlets of the Persian Gulf. It is no coincidence that in 1905, the British engineer William Willocks (1852–1932) began a major feasibility study for the irrigation of huge swathes of Mesopotamia, a plan whose tacit function was to reinstall British expertise in the region, and consequently to maintain British economic primacy (if not outright control) of the region. The Scottish archaeologist and acting consul-general William Mitchell Ramsay (1851–1939) summarized the grounds for Willocks's study, noting the inextricability of German railway production and the cultivation and “rebirth” of Mesopotamian topography:

Surely with those facts before them, the managers of a great railway would be able to justify a claim to superintend the banks of the rivers, and to have a voice in granting or refusing permission even for canals made according to Arab methods. Thus the foreigners would play a very important part in controlling the source of nearly all wealth

in the country, and they would get unrivalled opportunities for preparing irrigation schemes of their own.⁸⁸

Besides irrigation, a major front in the burgeoning British-German quest for dominance of Mesopotamia was the ultimate terminus of the Baghdad Railway. In 1907, an imperial committee presented surveys of various terminus options for the Baghdad Railway, a move that attempted to mobilize the decreased but not negligible influence that the British still held with the Porte in order to assert the Indian Ocean marine terminus of the railway (and thus a huge amount of its trade profits) as its own.⁸⁹ The sites surveyed included the shores of Bubiyan Island (known as “Bunder Shweikh”), Warba Island and Um Qasr, Basra, Faw (“Fao”), and Dahat Kathama (“Ras Kathama”).⁹⁰ Shortly thereafter, Sheikh Mubarak-us-Sabah of Kuwait made known his desires to host the terminus and to construct several lighthouses and other port houses.⁹¹

Willocks’s promotion of his irrigation plan and the British mobilization of the Ottoman front at the Persian Gulf angered much of the railway’s German administration as well as the German press who, channeling Britain’s reputation as a power with an unquenchable thirst for dominating anyone weak enough to be dominated, retorted by describing Willocks’ project as the potential outright colonization of Ottoman land:

Next to the question of the construction of the Bagdad Railway itself has notably stood that of the irrigation establishments in the valley of the Tigris and Euphrates. It seemed, so to speak, to be the natural economic continuation of the German railway undertaking.

⁸⁸ Acting Consul-General William Mitchell Ramsay to Sir Nicholas O’Conor, Baghdad, August 25, 1906, NA FO 406/25, 51.

⁸⁹ “Report of the Inter-Departmental Conference on the Bagdad Railway Terminus to Sir Edward Grey,” Foreign Office (London), October 2, 1908, NA FO 881/9056X, 14–16.

⁹⁰ Ibid.

⁹¹ See “Agreement respecting the Lease of the Shweikh [sic] Lands,” Kuwait City (“Koweit”), October 15, 1907, NA FO 406/33, 3–5.

Many a German explorer and traveller has [sic] made studies at the place itself, and many books have been published on the question. Two years ago there appeared also an article of the former Head of the Egyptian Department for irrigation establishments, Sir William Willocks, which discussed the possibility and costs of such a project. And, again, the English, to all appearances, have worked quicker than the Germans, for the highly significant announcement comes from Constantinople that Sir William Willocks has submitted to the Sultan, with the support of the British Embassy, an extensive plan for the irrigation of the Vilayets of Bagdad and Bussorah [Basra]. The announcement says nothing more nor less than that the English are on the point of beginning the great work of laying out new irrigation canals by the Euphrates and Tigris, and therewith to undertake the work of colonizing in those territories.⁹²

Referring to Willocks's submission to the Porte of a plan for the irrigation of Baghdad and Basra, a 1905 article from the *Koloniale Zeitung* notes similar sentiments, along with further details:

The first point of this project is the reconstruction of the Nahrewan [sic] Canal, which existed at the time of the Abbasidian Halifs [sic (caliphs)] and fell into decay at the end of the idle ages. Apart from this a number of smaller canals are to be drawn from the Tigris in order to irrigate the districts north-east of Bagdad; and to the south of that city, down to Bussorah [sic], besides the system of the ancient canal, large irrigation works are to be called into existence. As the water supply for the proposed system of canals would be taken from the Tigris, the latter would become too shallow for navigation; but on the other hand Sir William expects that the execution of this scheme would result in a great extension of the now inconsiderable cultivation of cotton, and in an extraordinary increase in the production of cereals, dates, and tobacco in the very fertile regions which his project of irrigation would render available.⁹³

It is, of course, not possible to take these reports at face value. First and foremost, “colonization” was emerging as a completely subjective term in the press. Whether the German press (and perhaps even its railway engineers and financiers) truly believed that railway development was merely a service of expertise whereas the irrigation of Mesopotamia was a colonial activity is, at best, dubious. How, for example, does the irrigation of the Konya Plain, a more or less concurrent event that was typically described

⁹² “New Difficulties for the Bagdad Railway Undertaking” [as translated by the British Foreign Office], *Tägliche Rundschau*, July 3, 1906, NA FO 406/26, 19–20.

⁹³ “The Economic Development of the Euphrates and Tigris Valleys” [as translated by the British Foreign Office], *Koloniale Zeitung*, July 15, 1905, NA FO 406/26, 21–22.

as a development project (*Entwicklung*) in the public German press and quite often a colonization project in private records and salon talks, factor in? The German press's distinction between development and colonization was a highly mutable one, and in the context of the response to Willocks's project it appears to act as something of a geopolitical foil.

Willocks proceeded undeterred, and the language with which he continued to promote and curry support for the irrigation project in Mesopotamia took on an ever-increasing amount of bombast and polemical verve. In 1909, he allegorized the project to the Garden of Eden and Noah's ark, hinting not only at the mythic quality of the project's potential but also giving it a not-so-subtle connection to a Judeo-Christian belief system:

The hopeless condition of affairs in the delta is in large measure due to the fact that the principal productions of Irak have their markets in the Eastern Mediterranean and in Europe, and it is from these same countries that Irak requires its imports: while in this direction there is no outlet. I am in entire accord with this opinion. The principal productions of the country—sheep, cattle, buffaloes, wool, liquorice [sic], wheat, barley, and rice—all want to go westwards; and it is to the lack of means to export these cheaply and to import cheaply the productions of Europe that the present deadlock is due. Immense areas which could be cultivated are not cultivated because the price of transport is prohibitive. It is not, however, only the trade of Irak which would feed this railway, the trade of Persia would follow the same line via Kermanshah and Khanikin, and in addition we should have the transport of passengers, and especially of Moslem [sic] pilgrims from Central Asia and Persia to the holy cities of Islam. This latter traffic would assume such proportions that the Hedjaz [sic] Railway would become remunerative and relieve the Treasury and country of a heavy burden. The railway to Haifa would also benefit. Irak itself would at last be open to European and American travellers, who would come in the thousands to see Baalbek, Palmyra, the site of the Garden of Eden, and the ruins of ancient Chaldea and Babylonia.⁹⁴

⁹⁴ Sir William Willocks to the Ottoman Minister of Public Works, Constantinople, October 10, 1909, NA FO 406/34, 25–28.

He goes on to note, “If Noah had been an engineer, he would have carried out the Habbania project instead of building an ark; and he would not only have saved his family, but his country as well.”⁹⁵

In 1909 Willocks, as reported by statesman Sir Charles Hardinge (1858-1944) defined the course of the irrigation definitively: its trace, its purposes, its labor needs, and the changes it would effect:

It should pass straight from Bagdad [sic] to Hit on the Euphrates, where the rocks on each side of the river would form a suitable foundation for the building of a bridge. From Hit the line should instead of following the course of the river, which has deep ravines on each side of it, continue along the high ground at some distance from the river to a town called Abou Kemal [sic], which has a considerable stationary population. From Abou Kemal [sic] the line should go straight to Tadmor [sic], and from thence follow the carriage road to Damascus, where connexion [sic] would be made with the Syrian Railway. Willocks explained that anyone who now went to the Euphrates would find both banks of the river more thickly populated than could be imagined, and crowded with enormous flocks of sheep, and with cattle, horses, goats, and buffaloes, all waiting for the first rain, when the grass springs up like magic and grows all over the desert. Then slowly and on foot the natives drive these enormous herds to the coast for sale, losing many on the road by robbery and death. To reach the coast takes these people several months, while, if a railway were to be constructed all these cattle could reach the coast within the space of two days. The result of this would be that the breeding of cattle would be enormously increased, and the Syrian desert would become as valuable a breeding-ground for cattle as the grass lands of Argentina and Texas. He argues also that such a railway is essential for the export of the cotton or grain which is to be produced on the irrigated lands. Were these products to be dependent for export on the Bagdad[sic]-Persian Gulf Railway, the cost would be so great as to make it hardly worthwhile to cultivate the crops. After arriving at the Persian Gulf, the crops would be taken to Bombay, and probably be re-exported to Europe, passing through the canal, with its heavy dues. There would thus be very great delay, before the crops reached Europe, and a much longer sea journey than if there were an exit at Tripoli or Haifa.⁹⁶

⁹⁵ Ibid, 27.

⁹⁶ “Minutes by Sir Charles Hardinge and Sir Edward Grey,” London (Foreign Office), November 6, 1909, NA FO 881/9157, 31.

Willocks's plan continued to aggravate the German Railway officials, particularly Arthur von Gwinner, and became the nexus of the German-British tension in Mesopotamia at a time when the tensions were also beginning to flair further east in Aqaba and Morocco.⁹⁷

3.9 Conclusion

Maps, as it should now be clear, played an ever-increasing role in charting (and sometimes eliciting) such tensions, and topography, the content, if you will, of these maps, was the lynchpin. Freud's 1900 development of a theoretical "topography of the mind" may be a very different kind of topography, but it evoked a similar reckoning with topography's importance as a psychospatial entity that could explain, at least in part, human behavior—from acts of latent desire to acts of self-defense.⁹⁸ The German topography of the Ottoman empire, having evolved iteratively from the eighteenth to the twentieth century, from linear bits of information to volumetric bodies of knowledge, also articulated acts of desire—for land and influence—as well as acts of defense and territoriality, a territoriality that prefigured events on as well as beneath the ground.

⁹⁷ See "Memorandum of Sir H. Babington Smith's Conversations with Dr. Gwinner," NA FO 406/34, 40, reported November 9, 1909.

⁹⁸ As outlined in Sigmund Freud, *Die Traumdeutung* (Leipzig: Franz Deuticke, 1900). The theory was called the *topographisches Modell* and characterized human behavior as part of a continuous topos (a volumetric "iceberg") of conscious, pre-conscious, and unconscious thought.

CHAPTER 4: ARCHAEOLOGY

Baghdad has grown a *Weltstadt*!¹

—Gertude Bell

Here [in Berlin] we have systems, while the British Museum possesses only individual
“curiosities.”²

—Felix von Luschan

4.1 Sketch, Spade, Gauge: German Archaeology and Railway Construction in Context

The history of archaeology in the late Ottoman empire mirrors the history of its railways. It began primarily as a British and French endeavor and gradually shifted to one where the most important sites were designated to German parties, who also acquired the greatest amount of funding.³ Looming large within this history is the role of the Deutsche Orient-Gesellschaft (DOG), founded in 1898 as a loose association of German orientalist, classicist, bankers, politicians, professors, and *dilettanti* interested in research on and the acquisition of classical and oriental antiquities alike.⁴ Among them was Georg von Siemens, President of the Anatolian Railway Company and member of

¹ Gertrude Bell to her mother, March 29, 1914, NUSC, Gertrude Bell letters.

² Felix von Luschan to Adolf Bastian, October 24, 1899, AMVk Ic vol. 4, 639/99. See also Andrew Zimmerman, “Scientific Seeing: Commodities, Curiosities and Anthropological Objects,” in *Visual Sense: A Cultural Reader*, eds. Elizabeth Edwards and Kaushik Bhaumik, (New York: Berg, 2008), 115–16.

³ Concerning the French and British reign over archaeology in the Ottoman empire through the late eighteenth century and the first two-thirds of the nineteenth, see the relevant chapters in the superb volume by Zainab Bahrani, Zeynep Çelik, and Edhem Eldem, eds., *Scramble for the Past: A Story of Archaeology in the Ottoman Empire, 1753–1914* (İstanbul: SALT/Garanti Kültür A.Ş., 2011).

⁴ See Marchand, *Down From Olympus*, 196–97.

the Board of Directors at Deutsche Bank,⁵ and Oswald von Richthofen (1847–1906), the undersecretary of the Foreign Ministry and director of the Colonial Office. Friedrich Alfred Krupp, the steel magnate whose product would be used to build the Baghdad Railway, supported the DOG with a yearly subsidy of 3,000 marks.⁶ In 1901, Kaiser Wilhelm himself became involved, granting the group a subsidiary status to the State Museums and effectively turning the institution into a state-funded armature for the German empire's cultural business with the Ottoman empire. Given the unlikely collaboration between Siemens (representing the railways' economic interests and high finance), Richthofen (representing colonial geostrategy), Krupp (representing industry), and the Kaiser himself (representing the state), it would be difficult to argue that the DOG's constitution was one purely of disinterested scholarly interest. Its very formation demonstrated both the synthetic role the Ottoman railways played in whetting and satisfying the German archaeological appetite and the myriad symbolic functions that their acquisition held for Berlin and Germany's own imperial self-fashioning. The DOG explained its necessity in compelling terms:

The time has come for us Germans to take our part in the great work of opening up and recovering the most ancient Orient by means of systematic excavation and thereby to supply German scholarship with the necessary materials for the expansion of Oriental archaeology, as well as [to supply] our public collections with monuments of ancient Asiatic art.⁷

⁵ Ibid., 196.

⁶ Ibid.

⁷ *Jahresberichte* 107ff. ZSaM Nachlass Schmidt-Ott, A-XXXIX, Vol. 1. See also Friedrich Delitzsch, *Ex Oriente Lux! Ein Wort zur Förderung der Deutschen Orient-Gesellschaft* (Leipzig, 1898) and Marchand, *Down From Olympus*, 197. The DOG secured the expansion of its mission through a quasi-secret accord ("Note Verbale") that came directly from the Sultan in 1899 and that was, at least in principle, the clearest sign of Ottoman favoritism toward the German empire. See Marchand, *Down From Olympus*, 199.

The DOG's formation coalesced around the archaeologist Robert Koldewey's (1855–1925) immensely important excavations at Babylon, which began in 1898 [Fig. 4.1]. New excavations sponsored by the DOG quickly followed: Abusir, Schurrapak, Borsippa, and Abu Hatab in 1902, Tell Megiddo and Tell Hum in 1903, Abusir el-Melew in 1905, Boğazköy in 1906, Jericho and Hatra in 1907, Tell el-Amarna in 1911, and Tul 'Aqir in 1913.

Despite the significant personnel and structural connections shared by the DOG and the Ottoman railways upon the formation of the former in 1898, a handful of excavations and several archaeological intrigues did not fall under the DOG's umbrella, either because they preceded it or because they were instigated by outsiders to the Berlin cultural machine that nevertheless had had an integral relationship with the railway construction. This is not a mere coincidence. Because the DOG represented the German empire and the Kaiser directly, its excavations maintained a scholarly as opposed to colonial face, dispatching archaeologists and orientalists to the Ottoman empire whose interests were, first and foremost, scientific. Because this chapter is primarily concerned with the interrelationship of railway construction, agents like the DOG, and archaeological digs in the Ottoman empire, its focus is more on provenance than museology, which is a topic with an immense importance to the history of art history and the national, patriotic and canonical value the artifacts brought (mostly to Berlin) held.⁸

⁸ See Can Bilsel, *Antiquity on Display: Regimes of the Authentic in Berlin's Pergamon Museum* (Oxford: Oxford University Press, 2012); Payne, "Portable Ruins"; Eva Maria Troelenberg, *Eine Ausstellung wird besichtigt: Die Münchner "Ausstellung von Meisterwerken muhammedanischer Kunst" 1910 in kultur- und wissenschaftsgeschichtlicher Perspektive* (Bern, Switzerland: Peter Lang, 2010).

As Wiegand's pamphlet indicates, the power brokers of the German cultural scene, actualized by the DOG, were aware of the railways' ability to generate knowledge and to bring antiquities home. What follows is an exploration of the dynamics of *how* this happened.

4.2 Defining the Lay of the Land: The Evolving Antiquity Laws

Every age has its ways of defining and delimiting territories, be they frontiers, economic resources, or ideological boundaries; but the rudimentary and immutable building block of territorial definitions is always the earth itself. Land, in other words, is always land; it is simply how it is governed, treated, or used that gives it a role greater than the sum of its parts. In the modern era, land has typically been defined before it can be governed or used, and this is most commonly done in written form. Territory, as such, is defined as much by the pen as it is by the fence. Much to this effect can be gleaned from the palimpsest of the Ottoman Antiquities Law which the DOG and others watched with a careful eye, a *firman* that was written and rewritten three times before the eventual collapse of the Ottoman empire: first in 1869, again in 1884, and then again in 1906. The writing and rewriting of the laws governing the mapping, excavation, and display of Ottoman antiquities trace, for some, a telltale story of Europe's cultural ascendancy and Ottoman decline.⁹ But here, within the realm of archaeology, the actors are different. The

⁹ Scott Redford has noted how archaeology in the early Republican period became naturalized as a recuperative effort to shore up Turkish autonomy over Turkish culture as an active antidote to the activities of the late Ottoman period. See Scott Redford, "What Have You Done For Anatolia Today?": Islamic Archaeology in the Early Years of the Turkish Republic," *Muqarnas* 24 (2007), 243-52.

perceived expansionists are not politicians or soldiers but rather university men and orientalist hailing from Britain, Germany, and France, and those preserving the corresponding Ottoman sovereignty are a mix of European-educated Ottoman bureaucrats and cultural leaders led by Osman Hamdi Bey, who must balance the geopolitical necessity of foreign guests in the political and economic affairs of the state with the growing concern that what had been pitched as the disinterested science of archaeology was in fact something more exploitative, if not downright colonial. Wendy Shaw has aptly described this as “the dialectic of law and infringement.”¹⁰ The 1884 Antiquities Law is universally understood as a historical turning point for imperial self-identity. It also had myriad implications for external affairs and territorial definitions, not the least of which involved the activities revolving around the rail construction. Before turning to this topic, however, it is necessary to briefly review what developed between 1869 and 1906.

As European interest in the antiquities of the Ottoman empire accelerated over the course of the nineteenth century, the Ottoman empire’s supposed indifference toward antiquities began to fade. Artists who documented antique sites (real and imagined), such as such as Louis-François Cassas, typically portrayed Ottoman characters—if they were depicted at all—in a state of rapturous intrigue and awe in the presence of these sites [Fig. 4.2]. The reality, however, was something different. Populations, particularly urban ones, had a long tradition of appropriating and spoliating antique sites for contemporary needs, a fact well documented in both domestic and foreign textual accounts as well as through numerous lithographs and chromographs, most famously those of other foreign

¹⁰ Wendy M. K. Shaw, *Possessors and Possessed: Museums, Archaeology, and the Visualization of History in the Late Ottoman Empire* (Berkeley: University of California Press, 2003), 108.

antiquarians, including James Stuart (1713–1718) and Nicholas Revett (1720–1804) [Fig. 4.3]. The relationship of the Ottoman populace to its antiquities was more likely characterized by an admixture of historical respect and pragmatic utility. While this might not be an outright “indifference,” it was most definitely contradistinctive to the utter delight with which European guests reacted to these sites, and it is this difference, not an indifference, that made regulation necessary by 1869.

The law was published in a concise statement in the official gazette on February 13, 1869, and in the French foreign press about a month later.¹¹ Summarizing its meaning for British and American interests in the Empire, the *Levant Times and Shipping Gazette* published the following description of the law:

Apart from its intrinsic interest, the archaeological discovery in Stamboul [İstanbul] recently reported by us—and to which the authorities, with laudable promptitude, gave instant attention—has proved of some importance in its results, having led to the promulgation by the Minister of Public Instruction of a règlement providing for the preservation of objects of antiquity and the establishment for that purpose of an imperial Museum in Constantinople. The new regulation requires that henceforth application for permission to excavate in any part of the empire shall be made to the Department of Public Instruction (under whose charge the museum is to be placed) and prohibits the exportation to foreign countries of any antiquities (ancient coins excepted) found in the course of such excavations, though they may be sold to private individuals resident in the empire, or purchased by the state. The 3rd article provides that every object found on private property shall belong to the owner of the soil. The right to remove antiquities is limited to such as are below the surface of the ground; those who disturb or damage memorials on the surface will be proceeded against. Permission officially applied for in any case by a foreign Power can only be granted by special imperial iradé. The last article provides for archaeological explorations at the expense of the State by persons competent to undertake such works, and those who are possessed of information calculated to promote the object in view are invited to communicate with the Minister of Public Instruction.¹²

As Edhem Eldem has argued, the law did not come out of thin air but was rather set into motion by a specific concern from the Governor of Aydın province, Hekimbaşı

¹¹ Ibid., 314.

¹² “Local News,” *Levant Times and Shipping Gazette*, March 22, 1869.

İsmail Pasha.¹³ The Governor had received a report spanning October 1867 to August 1868 from a certain Edwards, Deputy Commissary of the İzmir-Aydın railroad, that outlined the systematic dismantling in Ephesus of 51 blocks of stone by the British archaeologist John Turtle Wood (“Çon Portle Vud,” 1821–1890).¹⁴ Various earlier documents outline a semisystematic policy that required making plaster casts of important artifacts and donating one of every set or pairs of artifacts to the Porte. The governor, who was more familiar with these rules than his contemporaries and who clearly took them seriously, was not pleased with Wood’s behavior, and he petitioned the Council of the State on the matter a month after Edwards’s report was issued.¹⁵ The petition proposed the establishment of a “monitoring network of government inspectors of digs,” “severe restrictions,” and a system of distribution for the finds that would benefit the state vis-à-vis its museum.¹⁶ About two months later, the law made its way to the Public Works Commission and was ratified by seven signatories, including İbrahim Edhem (1819-1893), Osman Hamdi Bey’s father.¹⁷

As fascinating as this lead-up to the first sweeping and uncompromising law on the handling of antiquities is, the law cannot be considered a bureaucratic event alone. The İzmir-Aydın railway had been built and operated by the British and completed in

¹³ Edhem Eldem, “From Blissful Indifference to Anguished Concern: Ottoman Perceptions of Antiquities, 1799-1869” in *Scramble for the Past*, 316.

¹⁴ Ibid., 315.

¹⁵ Ibid.

¹⁶ Ibid., 317.

¹⁷ Ibid.

1856, making it the oldest railway in Anatolia. The Ephesus dig site lay only 3.5 kilometers away from the commercially negligible village of Selçuk, and British sources reveal that the railway planners (led by Wood himself) had been aware of the site and had intentionally routed the railway near to it.¹⁸ The British economic domination of the region connecting Aydın to İzmir and the railway officials' knowledge of the Ephesus site effectively served as Wood's entrée to the dig site seven years after the railway's completion and, like the Elgin marbles before it, preempted a particularly rapacious brand of archaeology.

Edwards's report to the Governor is, as such, rather counterintuitive, and it is difficult to imagine that the very impetus for the Antiquities Law was actually set into motion by a foreign rail administrator. Why, exactly, would a British rail official report the use of the railway for the extraction of valuable stones at Ephesus to the Governor? On one hand, it is possible that Edwards was trying to discredit or oust Woods from the area for any one of a number of reasons. However, it is more likely that Edwards was unaware of the gentlemanly understanding about the duplicate and plaster cast provisions, a supposition supported by his rote reportage of facts and figures. Edwards was, it would seem, doing his job, but therein lies the professional quagmire arising from the integration of railway construction and archaeology: if these were to work in tandem, the officials of both the track and the dig had to be cognizant of their collusion. Such was the new dialectical professional imperative that the Germans would later master.

The 1869 edict, set into law in 1874, was revised in a curious manner 15 years later in the Antiquities Law of 1884, which in some respects rectified the previous law's

¹⁸ See John Turtle Wood, *Discoveries at Ephesus: Including the Site and Remains of the Great Temple of Diana* (London: Longmans, Green, 1877).

shortcomings (large scale excavations such as that of Carl Humann at Bergama [Fig. 4.4] had nonetheless begun in the interim) and in other respects acquiesced to the significant pressure placed on the empire by its need of and desire for foreign investment and expertise. A memo issued by the office of the Vizier to the Ministry of Education explaining the need for the updates:

According to the antiquities law for the antiquities excavated and removed with an official permit, only one-third go to the state and the other two-thirds to the excavator and the landowner, allowing foreigners and consulates to apply for their own benefit. The persistence of this situation leads to the continued transport of rare and fine works to Europe, even though in other countries the excavators of similar works can only export plaster casts while the originals are left at local museums. This procedure is common in all places, ... so it has been suggested to the Ministry of Education. In the aforementioned regulation, from now on only a copy of works will be given to those who want to excavate on imperial lands, and the original will be taken for the imperial Museum.¹⁹

Although the recommendation viewed antiquities purely through a political prism, it also staked out a specific definition of what an antiquity in fact was:

All of the artifacts left by the ancient peoples who inhabited the Ottoman empire, that is, gold and silver; various old and historical coins; signs engraved with informative writings; carved pictures; decoration; objects and containers made of stone and clay and various media; weapons; tools; idols; ring stones; temples and palaces, and old game-areas called circuses; theaters, fortifications, bridges and aqueducts; corpses, buried objects, and hills appropriate for examination; mausolea, obelisks, memorial objects, old buildings, statues and every type of carved stone are among antiquities.²⁰

Beyond defining what was in fact antique, and arguably art, the law also elucidated the precise definition of territory in terms of soil by giving the Porte the power to expropriate all property, including private property, for archaeological purposes.²¹ This ran directly counter to the 1869 edict, which stated that the land on which archaeological

¹⁹ Mustafa Cezar, *Sanatta Batı'ya Açılış ve Osman Hamdi*, (İstanbul: Erol Kerim Aksoy Kültür ve Eğitim, Spor, ve Sağlık Vakfı, 1995), 329. See also Shaw, *Possessors and Possessed*, 110.

²⁰ BOA Meclis-i Mahsus İradeler 3401 (4 Rebülevvel 1301 / January 2, 1884) as cited by Shaw, *Possessors and Possessed*, 111.

²¹ Shaw, *Possessors and Possessed*, 112.

treasure was found was exclusively the province of the landowner. Soil consequently took precedence over surface, matter trumping mapping, in that any archaeological goods beneath the ground of private property rendered that property as one owned by the state.²²

In addition, while seemingly more dogmatic and protectionist than the 1869 edict, the edict of 1884 was also far more conciliatory to and anticipatory of the work of foreign scientists. In requiring a systematic application process for permits along with the production of cartographic records and the presence of a state site monitor (among other things), the Porte essentially created an antiquities bureaucracy that was akin to the one in neighboring Greece.²³ The law also facilitated the power of exception and allowed the Sultan to make exemptions where he saw fit for political or economic purposes or both, as he would do for the Germans.²⁴

A final revision to the law on April 23, 1906 explicitly demonstrates a more philosophical and scientific understanding of how archaeology defined Ottoman territory. The revision echoes the notion that all land is property of the state but deemphasizes the inherent expectation that archaeological speculation is to be the province of foreigners, instead noting that the de facto destination for all antiquities found in the Empire is the Imperial Museum, unless other provisions have been made with valid rationales. Osman Hamdi and the drafters of the law expand upon the list of possible antiques, creating an eclectic umbrella of both “known and unknown” entities, so as to allow for the possibility

²² Ibid.

²³ An excellent overview of the development of the paradigmatic development of antiquities regulations in Greece is Yannis Hamilakis, *The Nation and Its Ruins: Antiquity, Archaeology, and National Imagination in Greece* (Oxford: Oxford University Press, 2009).

²⁴ Shaw, *Possessors and Possessed*, 118–20.

of claiming virtually anything as an antiquity and thus, in effect, as state property. The arbitrary nature of the list, Wendy Shaw argues, is part of a stylistic and strategic “opacity” meant to presuppose such budge room.²⁵

For example, mosques and charities and holy buildings, abandoned lice-infested temples and synagogues (that is, the place of worship of Jews) that are now in disuse, basilicas (a type of church), churches, monasteries, burial towers, commercial inns, fortresses, towers, city walls, houses, theaters, bridges, horse squares, circuses (the place used in Roman times for carriage races and games), amphitheaters (the place used for plays and wrestling), baths, built seashores, wells with and without walls, cisterns, roads, obelisks, aqueducts, *höyük*s (burial hills), burial chambers with or without visible engraved surfaces, sarcophagi made of all sorts of materials that are or are not inscribed, poles, coffins, painted or gilt images or *nakab* [face veil with eye holes], reliefs, *stelai* (funerary stones, memorial stones, and memorials on poles), statues, statuettes, figurines (little clay statuettes), wells with inscriptions and reliefs, leather and papyrus (a type of leaf with brands on it), parchment (writing on leather), and handwriting on paper, worked flintstones and weapons, mechanisms and tools of all materials and vases and equipment for measuring, and decorations, rings, jewelry, scarabs (a thing made of clay in the shape of a bug), weights, water jugs, medallions, molds, engraved stones, things carved of wood, inlay work, and things made of ivory and bone are included... Old walls and the ruins of buildings and any type of broken parts of buildings and old objects, scattered bricks, stone, and glass and broken pieces of wood and ceramic are among antiquities.²⁶

The pamphlet on which the law was printed, small and easily portable, had the implicit quality of a field guide, a testimony of the extent to which archaeology had, like rail, become a territorial enterprise on the move.²⁷

If one considers the Antiquities Law not only as a definition of land but also as a definition of land by a particular set of historical actors, the picture becomes more complex. Osman Hamdi, for example, was considering these territorial questions from his office at the Imperial Museum in İstanbul or his waterfront summer home in Gebze, not from Mesopotamia or the Hejaz. Moreover, the Antiquities Law lacked the absolute

²⁵ Ibid., 127.

²⁶ Müze-yi Hümayunlar Müdiriyet-i Umumiyesi, *Asar-e Atika Nizamnamesi*, (İstanbul: Asır Matbaası, 1906), 3–4. as cited by Shaw, *Possessors and Possessed*, 127.

²⁷ Shaw, *Possessors and Possessed*, 127.

clarity that its writers probably sought, even after its third draft in 1906, a puzzle that makes the actors less effective because of certain contingent circumstances. Bedouin bandits, who were technically Ottoman, pillaged hitherto valueless stones from newly protected parcels of land while the Sultan struck down the Antiquities Law to suit German interests in antiquities and thereby not disrupt the Germans' irreversible role in the construction of the Ottoman rail network.²⁸ The irony is obvious. Finally, the overgeneralized characterization of the writing and rewriting of the Antiquities Law as a cultural act informed by political circumstances is one that fails to imagine a writer conceiving the unknown bounties of Ottoman territory and the humanistic knowledge and inspiration these bounties could elicit. In other words, the antiquities laws represented a means to a humanistic end, a subject's perceived right of access to the knowledge produced from, and thus on, their own soil.²⁹

One can also focus on the distinction between soil and surface articulated by the Antiquities Law to understand how archaeological territory was in fact perceived, and this is productive of a greater understanding of how the issue of Ottoman territory in its own mediation of land and soil in relation to the railway was defined by sovereignty. As the laws transitioned the definition of cultural property from a thing that must be visible (i.e., extant and above ground) if it is to be claimed to a thing that could be anywhere in

²⁸ A reflection on Abdülhamid's exceptionalism towards German archaeological interests is outlined in Marchand, *Down From Olympus*, particularly 188-227.

²⁹ Nur Altınyıldız outlines how archaeology and preservation, primarily as it related to İstanbul, gained credence in Ottoman culture in the period as a matter of patriotism and civic responsibility. See Nur Altınyıldız, "The Architectural Heritage of İstanbul and the Ideology of Preservation," *Muqarnas* 24 (2007): 281-305. One of the first publications to codify the new program of preservation and patriotism was Osman Ergin, *Türkiye'de Şehirciliğin Tarihi İnkişadı* (İstanbul: İstanbul Üniversitesi Hukuk Fakültesi, 1936).

any condition (i.e., it can now be broken and below ground), so too did the very definition of territory change. Beyond the important effect this had on the distinction between private and state property, it also bore the mark of a more conceptual paradigm shift that claimed that it was not the surface that mattered most, but rather the soil. Territory was thus defined by a certain universal quality—the concept of soil—and not by the scientific metrics typically mastered by Europeans through the science of geography or topography. As so many corners of the vast empire still lay unmeasured and understudied, this definitional shift functioned not only as a stopgap solution for the protection and retention of antiquities; it also anticipated the importance that the distinction between surface and soil would play in conjunction with the development of its railway network. Axel Heimsoth has argued that the affinity between archaeology and railway building derives from their common interest in geological conditions and the deliberate movement of earth.³⁰ While not incorrect, this characterization diminishes the conflation of the professions to a set of apolitical notions of the earth, unconcerned with the intrinsic stakes implied through the tacit definition of territory.

As a consequence of the current interest in the provenance, authorship, and repatriation of antiquities, the objects taken off of or out of Ottoman soil have come to be understood as not only “products” of ancient or Islamic cultures but also as the product of German enterprise and imperial fortitude and, to a lesser extent, the linchpin of the late

³⁰ See Axel Heimsoth, “Die Bagdadbahn und die Archäologie: Wirtschaftliche und wissenschaftliche Planungen im Osmanischen Reich,” in *Das große Spiel: Archäologie und Politik zur Zeit des Kolonialismus (1860–1940)*, ed. Charlotte Trümpler, (Cologne: Dumont, 2008), 355–56.

Ottoman understanding of territory.³¹ Macro (territorial) acquisitiveness is transmuted into micro (material) acquisitiveness and the preservationist strategies and tactics it produces. In an effort to bear out the full spectrum of the actors and their formative roles in linking the professions of archaeology and railway building with geopolitical territoriality, this chapter examines a range of figures and sites. The sheer diversity of the sites alone—Neolithic, Hittite, Phrygian, and Islamic—testifies to the broad swath of history at stake.

What follows is an examination of five discrete episodes in the history of the entanglement between the German construction of the Ottoman rail network and archaeology, presented in rough chronological order. This examination includes the excavations at Gordium, Sam'al, Tell Halaf, and Mshatta, as well as a broader consideration of the British-German rivalry across the archaeological sites in Mesopotamia and its relevance to similar questions.

4.3 Gordium

In the foreword to their 1904 report *Gordion: Ergebnisse der Ausgrabung im Jahre 1900* (Gordium: Results of the 1900 Excavation) published by the German Archaeological Institute (Deutsches Archäologisches Institut; DAI), brothers Gustav (1852–1917) and Alfred Körte³² (1866–1946), both classical archaeologists, open with an

³¹ See, for example, Deringil, *The Well-Protected Domains*, especially 16-43; Hanioglu, *A Brief History*, especially 109-49.

³² Alfred Körte may have also worked on the initial topographic and archaeological studies for the Baghdad Railway, as Carl Humann mentions him in a letter to Osman Hamdi Bey in 1893,

unexpected image [Fig. 4.5]. It is not an image from the dig at the site but rather a humble landscape containing a demure railway station set against a gentle hill in the background.³³ The station and its landscape evoke a prototypical *heimat*, where the change wrought by the railway is tempered by the primordial landscape and the comfort of its vernacular architectural form. The image could be set somewhere in the North Gemran Plain, the Harz Mountains, or the Swabian highlands, but is rather Phrygian Gordium, the site of the first scholarly excavation in Central Anatolia.

The building depicted is the Beylikköprü train station, completed in 1891 as part of the Anatolian Railway branch connecting Eskişehir to Ankara. The station served a small regional community located 12 miles from the regional capital of Polatlı and 68 miles from the Ankara terminus. Seen from the West, one can make out the profile of the so-called Tumulus MM (“Midas Mound,” the burial site of the king Midas) at the foot of some hills. The artificial earthwork, practically conical in profile, looms on the outer rim of the nearby village of Yassihöyük and had figured for generations in the lore of the region.³⁴ As for the story of Gordium, Alfred Körte discovered it on a visit to the region in 1893, two years after the completion of the nearby rail segment and one year after the

although no other records indicate that he ever did so. See Carl Humann to Osman Hamdi Bey, October 12, 1893, DAI Nachlass Humann, Briefwechsel, Kasten 3.

³³ Gustav Körte and Alfred Körte, *Gordion: Ergebnisse der Ausgrabung im Jahre 1900* (Berlin: Georg Reimer, 1904), vii.

³⁴ See Orta Doğu Teknik Üniversitesi, *Yassihöyük, bir Köy İncelemesi* (Ankara, 1965).

line opened to train traffic.³⁵ He brought his brother back to the site in 1900 after securing a tenured professorship at the University of Greifswald.³⁶

The engineers who had surveyed prospective railway routes in the inner Ottoman empire at the bequest of the Sultan had identified antique sites around Polatlı and documented them on maps as early as 1881³⁷ [Fig 4.6]. However, Gordium was never one of them, and its mysterious absence from the preparatory surveys, given its actual proximity to the final railway trace raises the question of how, precisely, it could have been missed. It would even appear that either the hill of the ancient citadel of Gordium or the Tumulus MM was mistaken as a natural topographic feature due south of Yassihöyük.³⁸

³⁵ Kenneth Sams, İlhan Temizsoy, and Ministry of Culture of the Republic of Turkey, *Gordion Museum* (Ankara: Dönmez Offset, 2000), 13.

³⁶ Anecdotally, Alfred Körte also married Frieda Gropius, the daughter of Martin Gropius, at this time. The two men shared an interest in ancient Greece, but Martin Gropius—despite being Körte’s elder—was somewhat more progressive in his ideas of what constituted its rightful appropriation in contemporary architecture. There are no sources that speak to the nature of their personal or intellectual relationship, but needless to say this is an interesting question. For Gropius’ conception of ornament, see Martin Gropius, ed., *Archiv für ornamentale Kunst* (Berlin: Winkelman-Springer, 1870).

³⁷ Examples can be found on the large format maps produced for the railway’s construction, which are housed in the Deutsche Bank Historisches Archiv. DBHI Signatur OR0370 (“Haidar-Pascha Angora Eskischehir —Konia Lage—und Hohenpläne”) reveals this documentation for the Eskişehir-Ankara line. Unfortunately, all of the maps in the container are archived as 1914, even though this particular section was constructed between 1890 and 1892. As these are working blueprints, it is fair to assume that they were created before the railway’s construction and not after it. A number of locations in the general proximity of the rail bed around Polatlı and Yassihöyük are identified as “Ruines,” often notated as small lines or dots. “Ruines” is the French word for “ruins” and is, in all likelihood, written in that language for its Ottoman audience. This makes the issue of what was noted and what was not all the more interesting. In German, the word would be “Ruinen,” which is similar enough that it could have been recognized.

³⁸ Based on the author’s own personal observation, both Tumulus MM and the Gordium Citadel would be very difficult to mistake as features natural to the area’s topography, which raises the possibility that they were deliberately not annotated as ruins.

An overlay of data sheds light on the questions regarding the early documentation of Gordium on maps. Archaeologists from the University of Pennsylvania conducted extensive digs of the entire ancient city, reaching the city walls in all directions by the end of the 1950s. The authoritative study of Gordium and the map created of the full site illustrates the important role of the Sakarya River, which separated the more public domains of the citadel, the burial mounds, and the commercial lower town on its Eastern bank from a residential outer hamlet without architectural distinction [Fig. 4.7]. Within a greater survey area, one can observe how the railway approaches the region from the northwest, swooping southwards against the natural contours, as it approaches the Sakarya River and the village of Yassihöyük, running parallel to the former and effectively steering clear of the latter. About 500 meters northeast of the village center of Beylikköprü, the line is punctuated by a completely isolated station before reorienting in a straight southeasterly line toward Polatlı. The rail's closest encounter with the ancient city limits is around a mere 1200 feet, but the rail is nonetheless left off of the Körtes' map, exactly at its western edge. Just a bit to the northeast of that edge is the riverside settlement of Pebi, dotted with its eight dwellings. An image of the village, the only other photograph in the 1904 study, closes the volume as a sort of sentimental parting word [Fig. 4.8]. The foreground of the village of Pebi shows a stone hut that the Körtes and their team erected as a makeshift café and gathering area for their two years on site. The social hub of the dig site lies within a stone's throw of the German railway.

Although the rail's traversal near Gordium's environs may not have been pure accident, the fact remains that there is no archival evidence to prove that it wasn't. Nevertheless, the records do indicate deep connections. First and foremost, the

triangulated connection of vested interests between the Körtes, the railway, and the Krupp steel company has not yet been parsed. Gustav Körte was close personal friends with Friedrich Alfred Krupp (1854–1902). Krupp’s foreign steelworks projects included the Anatolian and Baghdad Railways, for whom the firm was the main provider of its valuable steel products.³⁹ After Körte sent a request for a friendly “scientific subsidy” for the excavation at Gordium in September of 1899, Krupp responded obligingly and said that he would gladly give his friend the requested 20,000 marks for the endeavor, making no mention of his enthusiasm for the project on a scientific level but rather simply expressing his allegiance to his friend’s pursuit.⁴⁰ The publication of the results in 1904 is dedicated to Krupp, indicating that the money had been used toward a publication subvention. Krupp is feted by the Körtes in Latin: “Multis ille bonis flebilis occidit” (he fell lamented by many great men), an excerpt from the Horacian odes (1.24) in which Horace alludes to the great loss of the orator Quintilian.⁴¹

Additionally, a closer reading of the extensive text that stands between the two images in the Körtes’ publication—a familiar German railway station and a primitive stone hut—reveals the intellectual affinities the railway and the excavation had and perhaps provides some insight into why, precisely, the “discovery” of Gordium can be considered as imperialistically synchronized rather than accidental. In addition to thanking a number of key Turkish officials for their warm welcome and assistance—

³⁹ In addition to the construction records, this is confirmed by observation of the imprints on the rails themselves.

⁴⁰ Friedrich Alfred Krupp to Gustav Körte, Baden-Baden, October 1, 1899, HAK FAH 3 C 63, Konzept hs. (Sekretariat).

⁴¹ Körte and Körte, *Ergebnisse*, i. It remains unclear what exactly the connection was between Horace’s quote and Krupp, if any.

Osman Hamdi, his brother and archaeologist Halil Edhem Bey (1861-1938), Commissioner of the Turkish Government Ahmed Feridun Bey, and the head of the Ankara gendarmerie, Zaptie Tefvik-Agha Bey —the Körtes illuminate the critical role of the railway and its officials:

Upon disrupting the busy schedule of the management of the Anatolian Railway Company, Georg von Siemens himself granted us permission to take up residence in the small but perfectly kept and clean station building apartment. Seeing how impossible it is to find any such equivalent accommodation in such a desolate place, the permission was all the more appreciated and we are most grateful for it. We found the officials of the company, from top to bottom, always willing to offer support for the numerous problems that arise during an excavation in the interior of Asia Minor, problems that arise to a much greater degree there than they do on the coasts... Mr. G. Tria, the Track Master at Polatlı whose daily service passed through Beylikköprü [sic], is as much an enthusiastic friend of archaeological research as he is a man with thorough knowledge of the country and its people and has been an invaluable adviser, helper and friend during the entire duration of our stay.⁴²

Siemens' personal provision of the Beylikköprü train station as the residence of the Körtes and unofficial headquarters of the Gordium dig reveals the creeping hold of German soft power on the ground where tracks had been laid. This is memorialized by "Mr. Tria" of nearby Polatlı, a low-ranking engineer whose enthusiasm for archaeological knowledge and ethnographic savvy made a lasting impression. To be sure, neither the Sultan nor Osman Hamdi or Halil Edhem objected to the dig of the Phrygian capital, certainly one of the most exciting frontiers of the field at the time. [Fig. 4.9] But

⁴² Körte and Körte, *Ergebnisse*, viii. "Durch gütige Vermittlung des leider inzwischen mitten aus seiner großartigen, weitverzweigten Tätigkeit abberufenen Georg von Siemens war es uns von der Direktion der anatolischen Eisenbahngesellschaft gestattet worden, in dem kleinen, aber in musterhafter Ordnung und Sauberkeit gehaltenen Stationsgebäude Wohnung zu nehmen. Bei der Unmöglichkeit, in der menschenleeren Gegend eine nur annähernd gleichwertige Unterkunft zu finden, war durch mannigfaches Entgegenkommen zu dem lebhaftesten Danke verpflichtet. Ebenso fanden wir bei den Beamten der Gesellschaft, hohen wie niederen, jederzeit bereitwilligst gewährte Unterstützung in den zahllosen kleinen und großen Schwierigkeiten, welche eine Ausgrabung im Inneren Kleinasiens in viel höherem Maße mit sich bringt wie eine solche an der Küste... Herr Bahnmeister G. Tria in Polatly [sic], welchen sein Dienst täglich nach Beylik-köprü [sic] führte, ein ebenso begeisterter Freund der Altertumsforschung wie gründlicher Kenner von Land und Leuten, war uns während der ganzen Dauer unseres Aufenthaltes ein unschätzbarer Berater, Helfer und Freund."

it remains unclear whether the way in which the Körtes piggybacked onto the railway's literal and figurative infrastructure was genuinely a product of the all-around air of transnational congeniality the Körtes stress in their acknowledgments.

The Körtes' descent on this barren patch of Central Anatolia was, more synthetically, a soft power struggle of an entirely different variety. In German hellenist and orientalist circles alike, the enigmatic Phrygians represented a threshold culture. The definite Greek origins of the population were nonetheless inflected with a more implacable mélange of Armenian, Hittite, Semitic, and Assyrian and otherwise alien cultural indices (namely, language, music, and art). By the turn of the twentieth century, the positivist demystification of this threshold was primed to function as the stage for the so-called "Orient or Rome" debate.⁴³ On this stage, a historiographically self-sponsored and impermeable Western "civilization" crafted by hellenists could trample the efforts of upstart orientalists trying to locate the wellspring of western culture based on inquiry rather than received knowledge. The pressure enacted by this confrontation of Occident and Orient was something Alfred Körte saw epitomized in nearby Eskişehir:

What makes Eskişehir especially fascinating is the direct clash of the Oriental and the European. Here there is no mention of the Orient being assimilated into the occidental cultural forms. The image of the Orient is not yet distorted by annoying European additions, as for example in Constantinople and even more so in Smyrna. Without any

⁴³ The "Orient or Rome" debate begins with a polemical text by Josef Strzygowski, published in 1901: Josef Strzygowksi, *Orient oder Rom: Beiträge zur Geschichte der spätantiken und frühchristlichen Kunst* (Leipzig: J. C. Hinrichs'sche Buchandlung, 1901). For its ramifications on historiographic debates, see Christina Maranci, "Medieval Armenian Architecture in Historiography: Josef Strzygowski and His Legacy" (PhD diss., Princeton University, 1998, 89–99); Suzanne Marchand, "The Rhetoric of Artifacts and the Decline of Classical Humanism: The Case of Josef Strzygowski," in *Proof and Persuasion in History*, eds. Anthony Grafton and Suzanne Marchand (Middletown, CT: Wesleyan University Press, 1994), 117; Talinn Grigor, "Orient oder Rom? Qajar 'Aryan' Architecture and Strzygowski's Art History," *The Art Bulletin* 89, no. 3 (September 2007): 562–90.

intermediary, the colorful oriental life stands next to the occidental cultural wave suddenly rushing in.⁴⁴

Not surprisingly, the Körtes' findings in Gordium sponsor a wholly Hellenist reading, and significant efforts are made to give quantitative as opposed to cultural or diffusionist explanations for "divergences" from classical norms. Despite what appears to be a considerable effort to legitimize a Hellenist stronghold as far east and inland as Gordium was, the Körtes also intone the wholly dramatic nature of a sweeping eastward Bronze Age Balkan migration to Gordium. The assertion of a Greek origin in the gravitational center of the Ottoman empire is a Eurocentric claim on the Ottoman empire that is given literal and geographic depth beyond the familiar antiquities dotting the Mediterranean littoral. The railway, by its very nature kindred to land and not sea, proves not only to reinforce this symbolically but also to facilitate it logistically.

4.4 The Berggren Archaeological Portfolio

A significant portion of the Ernst Mackensen archives comprises photographic albums of the Anatolian and Baghdad Railways and environs, catalogued simply under the rubric "Karl Schrader's Tätigkeit für die Anatolische Eisenbahngesellschaft" (Karl

⁴⁴ Alfred Körte, *Anatolische Skizzen* (Berlin, 1896), 5; "Was Eskischehir [sic] gegenwärtig einen besonderen Reiz gibt, ist das unvermittelte Aufeinanderprallen des Orientalischen und des Europäischen. Hier ist noch von feinem Aufgeben des Morgenlandes in den abendländischen Kulturformen die Rede, das Bild des Orients ist noch nicht entstellt durch störende europäische Zusätze, wie etwa in Konstantinopel und mehr noch in Smyrna, ganz unvermittelt steht das farbenfreudige orientalische Leben neben der plötzlich hereingeströmten Kulturwelle des Occidents." As Malte Fuhrmann has also pointed out, a similar passage can be found in Wolfgang von Öttingen, *Unter der Sonne Homers: Erlebnisse und Bekenntnisse eines Dilettanten* (Leipzig, 1897), 277; Malte Fuhrmann, "Visions of Germany in Turkey: Legitimizing Imperialist Penetration of the Ottoman Empire" (paper presented at "The Contours of Legitimacy in Central Europe: New Approaches in Graduate Studies," Graduate Conference in Central European Studies, St. Antony's College, Oxford, May 2002).

Schrader's Employment for the Anatolian Railway Company).⁴⁵ Karl Wilhelm Franz Gabriel Schrader (1834–1913) was a progressive jurist who assumed an advisory position for Deutsche Bank in 1883, a place on the Board of Directors of the Anatolian Railway in 1889, and eventually, a place on the Board of Directors of Deutsche Bank in 1894.⁴⁶ Two of the eight albums contain photographic documentation of sites of archaeological interest within an approximately 60-mile radius of Konya, conducted by the İstanbul-based Swedish-born photographer Guillaume Gustave Berggren (1835–1920).

Berggren photographed the entirety of the Anatolian Railways, including their stations, major bridges, and tunnels, sometime around its completion in 1896 and most certainly before the beginning of the construction of the Baghdad Railway in 1904;⁴⁷ and many of these images, which are also contained in the Mackensen archives, were circulated and have occasionally been published. Because of the documentary and promotional purposes that could be served by Berggren's photographs, it is likely that it was Schrader who commissioned them. The three sets of photographs of archaeological ruins, however, are noteworthy because, unlike the railway albums, they were never circulated or published by Schrader or anyone else and have hitherto remained unexamined. Consequently, it is not unreasonable to assume that they were only meant to be seen by the railway officials.

⁴⁵ NLa Nr. VIII, 3-10. It is not clear why these files are in Ernst Mackensen's archives. To be sure, Mackensen and Schrader would have known one another through work on the Anatolian Railways, but a more specific connection may be explained by the fact that both men were from Wolfenbüttel—which, incidentally, is the location of the NLa.

⁴⁶ Wolfgang Ayaß, "Schrader, Karl Wilhelm Franz Gabriel," *Neue Deutsche Biographie*, vol. 23 (Berlin: Duncker & Humblot, 2007), 505.

⁴⁷ The lack of photographs of the Konya station, which was completed in 1896, indicates that the prints may have been produced shortly before that time, and likely in 1894 or 1895, a period when Berggren was very active.

The format of the photographs, stored loosely in boxes, indicates that Berggren produced them contemporaneously with the main railway photographic sets, as all volumes contain approximately 8×10.75 " prints adhered to a standard cardboard backing with a decorative border of stars and crescents in their corners—a format typical for photographs produced in series at that time in the Ottoman empire, including the Abdülhamid II albums, which may have served as a point of reference. Berggren's name is inscribed as "G. Berggren" in the lower right corner, while the lower left corner is reserved for a caption, written in French, along with a series number. Although most of the images originate from the Konya region, there are isolated incidents of images from sites further afield, such as the column of Emperor Augustus at Ankara [Fig. 4.10].

The three boxes in question contain 34, 42, and 32 prints respectively.⁴⁸ The prints are not stored in numerical order and their minimum to maximum range spans photographs no. 61 to 147, which indicates their status as a significant interval of 87 photographs in Berggren's greater project of documenting the railways. Generally, the numbering system includes numerals alone, although occasionally there are also letters (e.g., 101A), which may or may not indicate the presence of a second photograph (i.e., 101B). A handful of numbers are identical despite the fact that they depict different images. Eliminating duplicates and including five prints without numbers, the three cartons contain 85 of the estimated 87 prints in Berggren's series. The two missing photographs are probably from a gap in the sequence of photographs of the Taş Madrasa at Akşehir. More often than not, the captions indicate the location that was photographed

⁴⁸ NLa 240N Nr. VIII, 5I, 5II, 7.

and they move roughly from the northwest to the southeast, parallel to the trace of the railway as it stood c. 1895.

The subject matter of the photograph sets varies, but the vast majority comprise depictions of both pre-Islamic and Medieval sites, with occasional images of modern sites or panoramas. The pre-Modern sites include:

Nos. 61–67:	Arslan Kaya and the Phrygian tomb ruins of its environs.
Nos. 70–75, 79(1):	The temple of Jupiter at Aezani.
No. 76:	The Sultan Han caravanserai at Aksaray.
No. 79(2):	Madrasa at Çay.
Nos. 84–89:	The Taş Madrasa at Akşehir.
No. 91:	Nasreddin Hodja's tomb at Akşehir.
No. 92:	Seyyid Mahmud Hayrani's tomb at Akşehir.
Nos. 96–96A:	Alaeddin Mosque at Konya.
Nos. 97, 107:	Palace of Kubadabad near Konya.
Nos. 98–99:	İnce Minareli Madrasa at Konya.
Nos. 101–103:	Sahib-i Ata mosque and tomb at Konya.
Nos. 104–106:	Karatay Madrasa at Konya.
Nos. 108–111:	Sircarli Madrasa at Konya.
Nos. 112–113:	Hagia Sophia at Konya.
No. 114:	Tomb of Shams Tabrizi at Konya.
Nos. 115–117:	Phrygian statuary and fragments in and around the bedesten at Konya.
Nos. 122–128:	Sultan Han at Aksaray.
Nos. 129–135:	Various Phrygian tombs near Hamam.
No. 136:	Byzantine rock-cut church at Ayache-in. ⁴⁹

⁴⁹ This single photograph also appears in FAM Favrod Collection, Image ID FCC-F-014837-0000.

Nos. 138–147: Various Phrygian and Hittite tombs, necropoli, monuments, and ruins in or near Yazılıkaya, Demerli, and Hasanbey.

It is notable that in the portfolio of sites, which span approximately three millennia of Anatolian history and a broad area of archaeological interest, only one is classical: the Temple of Jupiter at Aezani. Berggren's portfolio plainly indicates the railways' parallel penetration of new archaeological territory, and while the photographs have, in many cases, a tourist's gaze, they also often have a quasi-scientific staging. A visual analysis of a selection of these photographs bears this out.

Photograph no. 97 depicts ruins of the former residence of the Seljuk Sultan Alaeddin Kaykubad on the shores of Lake Beyşehir.⁵⁰ [Fig 4.11] Berggren's photograph hones in on an extant (and still famous) portion of a corner of the palatial complex from a short distance, placing the rectangular tower precisely in the center of the picture frame. This distance is nonetheless intimate enough to reveal the palace's most salient characteristics of both construction and style. The heavy masonry at ground level is contrasted with the lighter brickwork exposed in many sections by the eroded plaster. Whether Berggren knew it or not, this captured the dynamic arrangements of the small

Archivi Alinari's title for the photograph is "A Byzantine church carved into the rock, located near Ayache-in, on the outskirts of the Hamam Station, Turkey," and the photo is dated between 1880 and 1890.

⁵⁰ The most important source on the palace is Friedrich Sarre's monographic studies of the structure. See Friedrich Sarre, *Reise in Kleinasien, Sommer 1895: Forschungen zur seldjukischen Kunst und Geographie des Landes* (Berlin: Geographische Verlagshandlung D. Reimer, 1896). Sarre's study as well as his travelogue document the intimate and anticipatory interrelationship of archaeology and the eventual museology of Islamic art in Germany, which would set the pace for the practice across Europe. Other sources on the Kubadabad Palace include Ekrem Akurgal and Léo Hilber, *The Art and Architecture of Turkey* (New York: Rizzoli, 1980); Rüçhan Arık, "Kubad-Âbâd Excavations (1980–1991)," *Anatolica* 18 (1992): 101–18; Oktay Aslanapa, *Turkish Art and Architecture* (New York: Praeger, 1971), 162–64; Katharina Otto-Dorn, "Kubadabad Kazıları 1965 Ön Raporu," *Türk Arkeoloji Dergisi* 5.14, no. 1–2 (1967): 237–43; Scott Redford, "Thirteenth-Century Rum Seljuq Palaces and Palace Imagery," *Ars Orientalis* 23 (1993): 219–36.

bricks and makes clear the continuity of the Seljuk construction techniques from earlier and further East and demonstrates the brick's ability to articulate an array of unique forms, including the *muqarnas* of the buttresses, the ogee openings in the upper portion, and the herringbone pattern of the revetment's substrate. Wood beams protrude from the tower and reveal the reinforced structural system. In the lower portion, a lion-like figure can be seen embedded in the opening, illustrating that figural motifs were abundant not merely in the polychromatic tile work of the palace but also as integral parts of its architecture.

Photograph no. 99 depicts ruins of the İnce Minareli madrasa ("slender minaret madrasa") at Konya (thirteenth century), founded by Sâhib Ata near the center of the city [Fig 4.12]. Berggren's photograph centers on the madrasa's elaborate decorative stone portal, placing its rectangular form, similarly to the Konya tower kiosk, in the center of the composition. Berggren's composition captures the madrasa's most important artistic qualities. Front and center are the interlocking ribbons that frame the doorways and scale the central axis of the building. The ribbons, containing the epigraphy of Qur'anic suras 36 and 110, perform a different visual effect in comparison to the portal's stitched and floral relief motifs that articulate, along with the dome and with its clerestory, the structure's dialogue with eastern Iranian and Syrian idioms.⁵¹

⁵¹ Sources on the İnce Minareli madrasa include Ahmet Ertuğ, *The Seljuks: A Journey through Anatolian Architecture* (İstanbul: Ahmet Ertuğ, 1991), 219; Tamara Talbot Rice, *The Seljuks in Asia Minor* (New York: Praeger, 1961), 280; Mehmet Uysal, Dicle Aydın, Kerim Çınar, and Yavuz Arat, "Afyon Sultandağı Sahip Ata Kervansarayı," *Türk İslam Medeniyeti Akademik Araştırmalar Dergisi* 2 (March 2006): 77–112; M. Ferit and M. Mesut, *Selçuk Veziri Sahip Ata ile Oğullarının Hayat ve Eserleri* (İstanbul: Türkiye Matbaası, 1934); S. Bayram and A. H. Karabacak, "Sahib Ata Fahrü'd-din Ali'nin Konya, İmaret ve Sivas Gök Medrese Vakfıyeleri," *Vakıflar Dergisi* 13 (1983): 31–69.

The capture of the layering of Konya is again evident in photograph no. 112, which depicts a small building identified simply as “Aya Sofia” with a spoliated façade that is still standing in the historic city center. [Fig 4.13] Its function here is most likely as a *waqf*.⁵² Berggren again uses the main entry façade as the center of his composition, which in this instance is a square placed at the center of the rectangular composition. The edges of buildings on either side of the photograph evoke the compact nature part of the city. A ghostly flash of a passerby can be seen on the right edge of the frame. The semiruin state of the façade, however, is the most memorable element of Berggren’s photograph. The decorative panels adhered to the frontal wall remain mostly on the lower portions and appear to have been removed or fallen off on the upper levels. In fact, a spoliation of the façade is evident in the use of one of the decorative stones as a support for the stair platform ascending from the street level to the entryway. The entryway comprises a unique composition with five cusped arches. The entry portal is inset and discontinuous from the rest of the structure and appears to have replaced an earlier portal with a different composition.

Two images that were also captured in Konya reveal improvisational moments and indicate a bit more about Berggren’s, and possibly Schrader’s, activities in the city. The first, photograph no. 115, is entitled “Lions phrygien dans la cour du Kal-Khane à Koniah” (Phrygian lions in the courtyard of the Kal-/Hal- Han[e] in Konya) and depicts four freestanding statues of lions placed in the corner of the courtyard of (as the caption indicates) a smelting factory or foundry, flanking its main entrance to the street [Fig 4.14].

⁵² See J.M. Rogers, “Waqf Patronage in Seljuk Anatolia: The Epigraphic Evidence” *Anatolian Studies* 26 (1976): 69-103 for a discussion of the way in which writing traces the history of Seljuk *waqf* construction.

The structure is most likely a building where antiquities were kept, possibly off of or with some relationship to modern Kalhane Cadessi, a street in Konya. Squatting behind the foremost lion are two men, presumably Turkish, looking skeptically at the camera. Although the caption indicates the lions in the courtyard as Phrygian, this may be incorrect. As the Danish-born German diplomat, Julis Hardegg Löytved (b. 1874), identified in his own work in Konya⁵³, lions were found at the base of Konya tower kiosk and were perhaps in dialogue with the Phrygian motifs in the region, making it possible that the lions were, in fact, Seljuk.⁵⁴ Incidentally, one such lion was evident in the image of the Konya tower kiosk at its lower level, published in *Servet-i Fünun*'s exposé of the Anatolian Railways in 1896 (see Chapter 2). The art historian Friedrich Sarre (1865-1945) would these elements in greater detail in 1936.⁵⁵

Photograph no. 117, entitled “Fragments de sculpture dans l’Eski-Bedesten à Koniah” (Fragments of sculpture in the old market of Konya) shows a series of stone tablets that appear to have been removed from the same source and that depict a number of men, each set within a portico, interacting with one another. [Fig 4.15] Their dress and the decoration of the tablets indicates the status of the tablets not as Seljuk but rather as part of a Sidemara type Roman sarcophagus.⁵⁶ A separate tablet with darker coloration

⁵³ Julius Hardegg Löytved, *Konia: Inschriften der seldschukischen Bauten* (Berlin: Julius Springer, 1907).

⁵⁴ See also Aysin Yoltar-Yıldırım, “Julius Harry Löytved-Hardegg: A German Consul in Konya in the Early 20th Century,” paper presented at the International Conference on Turkish Art, Busapest, September 7, 2007. Available online at www.turkishhan.org/Loytved%20Hardegg.htm, accessed February 26, 2014.

⁵⁵ Friedrich Sarre, *Der Kiosk von Konia* (Berlin: Verlag für Kunstwissenschaft, 1936).

⁵⁶ I thank Scott Redford for suggesting this specific possibility to me.

depicts a winged female figure wearing a crown, today known as one of the most famous works of Seljuk art of stone and wood, held by the İnce Minareli Medrese museum. All of the tablets have been delicately placed on hay and lean against a sizable pile of timber. Their careful arrangement, depicting them like inventory being catalogued, suggests that they were clandestinely brought to the hidden location, photographed, and then carried off. Despite its nationalistic tone, İbrahim Hakkı Konyalı's *Âbideleri ve Kitableri ile Konya Tarihi*⁵⁷ admits that the looting of stones in the city was most commonly executed by local gangs, suggesting that the engineers and Berggren may have had some interaction with said gangs while exploring Konya.⁵⁸ Furthermore, in the art historian Sarre's reflection on the dismantling of Konya's city walls, it becomes clear that the spoliation and perhaps black market for stones and art in stone had become a practice with a certain normative legacy in the city.⁵⁹ As Julian Raby and Scott Redford have demonstrated through analyses of the work of Léon de Laborde, the city walls of Konya had ample amounts of pre-Islamic spolia, although a comparison with de Laborde's engravings do not reveal the Siderama type sarcophagus stones evident in the image in the bedesten.⁶⁰ Neither do they appear in the Konya Archaeology Museum. Needless to

⁵⁷ İbrahim Hakkı Konyalı, *Âbideleri ve Kitableri ile Konya Tarihi* (Konya: Yeni Kitap Basımevi, 1964).

⁵⁸ I am indebted to Scott Redford for orienting me to most of the issues surrounding the photographs in Konya and for being so generous with his thoughts on what links the medieval sites in the region to the modern era.

⁵⁹ Friedrich Sarre, *Der Kiosk von Konia*. It is possible that the stones are documented in the notes of Scottish scholar William Ramsay, who excavated the citadel of Konya in the early twentieth century. Ramsay's archives are held at Aberdeen University and may be consulted at a later date for a further investigation.

⁶⁰ See Julian Raby, "Nur al Din, the Qastal al-Shu'aybiyya, the 'Classical Revival'," *Muqarnas* 21 (2004): 289-310. Scott Redford discussed the same imagery in a public presentation at the

say, when the walls were pulled down a lot vanished and this image may elicit an exciting mystery.

Photograph 124 is the first in the set to evoke a larger sense of archaeological exuberance, depicting the thirteenth-century Sultan Han near Aksaray. The photograph was taken before Gertrude Bell's famous photographs of the structure in 1907.⁶¹ [Fig. 4.16]. The photograph, given the probable dating of the album, may also precede Sarre's illustrative recording of the site, published in his *Reise in Kleinasien* in 1896.⁶² Berggren's photograph depicts the inner courtyard, where one can discern at the center of the composition the freestanding kiosk at its center. The kiosk, partially in ruins, is flanked by what appear to be two improvised mud houses, and the kiosk itself appears to function as casual storage for agricultural equipment. A striking characteristic of the photograph is the long arcade on the right side of the composition as well as the domed extension in the distance, which reveals the structure's unique organization as a nonrectangular caravanserai. Two figures can be seen in the photograph moving freely about their daily business, lending the image a picturesque quality that also articulates awe for the unrealized splendor of the site. The vantage point of the photograph suggests

Massachusetts Institute of Technology on February 10, 2014. The engravings in question are from Léon de Laborde, *Voyage de l'Asie Mineure* (Paris, 1838).

⁶¹ Regarding Sultan Han, see Aysil Tükel Yavuz, "The Concepts that Shape Anatolian Seljuq Caravanserais," in *Muqarnas* XIV (Leiden: Brill, 1997), 80–95. For Gertrude Bell's documentation of the site see Gertrude Bell photographs, Folder I, Photos I 195–210, NUSC. There is also a very clear plan and axonometric of the structure in Mark Jarzombek, Vikramāditya Prakash, Francis D.K. Ching, *A Global History of Architecture* (Hoboken, NJ: John Wiley & Sons, 2010), 380.

⁶² Friedrich Sarre, *Reise in Kleinasien*. See also Blessing, Patricia, "Friedrich Sarre and the Discovery of Seljuk Anatolia," *Journal of Art Historiography* 11 (forthcoming, December 2014) and *ibid.*, "Reframing the Lands of Rūm: Architecture and Style in Eastern Anatolia, 1240–1320" (Ph.D. diss., Princeton University, 2012). I thank Patricia Blessing for sharing the former of these two citations with me before the former was published.

that it was taken atop the han's main portal and its conical vault tympanum, evoking not only the question as to how Berggren was able and allowed to mount the structure but also why he chose to focus on the macro composition with its reappropriated courtyard, instead of or in addition to the notable detailing of its main portal.

Photograph no. 138 depicts the striking Phrygian façade-tomb dedicated to King Midas, completed ca. the eighth century BC [Fig. 4.17]. This site was, in fact, documented prior to Berggren's photograph in an etching by Ernest Breton (1812–1875) from 1843 [Fig. 4.18]. Here Berggren makes his first effort to measure the site precisely, through a European figure standing in the opening at the bottom of the façade with a metric measuring stick. Both the photographic medium and the human scale offered in the photograph illustrate the gross inaccuracy of Breton's 1843 representation. Photograph no. 140 depicts the nearby altar of the Phrygian acropolis at Yazılıkaya [Fig. 4.19]. Sitting on the right side of the structure are a man of about 40 years of age and three young children, all appearing to be of European descent and wearing fezzes or fez-style hats. It is not known with certainty who the adult male or the children are, but it is possible that the former is Schrader himself and that at least one of the children is his son.⁶³ The man and the children wear unenthused expressions, indicating that they are perhaps, as in the previous image, simply there to demarcate scale. A similar strategy appears in photograph no. 146, which depicts a ruined Phrygian tomb between Demerli

⁶³ In 1872 Schrader married Henriette Breymann (1827–1899), the pedagogical reformer and activist for women's education, and the couple was known to take care of the children of others—so it is possible that the children are under Schrader's care, if not in fact his own. See Wolfgang Ayaß, "Schrader, Karl Wilhelm Franz Gabriel," *Neue Deutsche Biographie*, vol. 23 (Berlin: Duncker & Humblot, 2007), 505.

and Hayran [**Fig 4.20**]. Here a man who appears to be Ottoman casually rests his arm against the massive carved rock depicting a semihuman, semianimal figure.

Berggren's photographs tread a fine line between the documentary and the narrative, and it is the ambiguous ways they straddle the two genres that makes them at once enigmatic and inviting. The ambiguity also expresses the tension of the archaeological mission—one that attempts to document sites of interest but that also expresses the excitement and curiosity sparked by the encounter.

4.5 Felix von Luschan, Ethnoarchaeology, and Railway Construction at Sam'al

In a 1908 article in the *Zentralblatt der Bauverwaltung* reporting on the finds of 15 years of excavations at the Bronze Age site of Sam'al (Hittite: Yadiya, Turkish: Zincirli), Gustav Jacoby (fl. 1888–1902) summarized the ways in which the onward march of the Baghdad Railway also stood to benefit a site whose discovery long preceded railway activity in the region:

The Baghdad Railway, whose responsibilities are also the economic development of Syria and Mesopotamia, will bring our culture to a country that once stood on a far higher level of education than Europe. Those who travel the country witness an extraordinary number of hills, known in Arabic as “tell,” and when they do not find the ruins of buildings, they are likely unaware that under these grassy hills ancient cultural sites are buried under rubble and earth. The hills ... have originated from a culture that flourished after a previous community had been destroyed with fire and sword. The walls of unbaked bricks disintegrate after their wooden parts are burned or charred, the residues form a shallow grave and return to clay and earth. They grew into hills, layer upon layer, for centuries, if not millennia.⁶⁴

⁶⁴ Gustav Jacoby, “Ausgrabungen in Sendschirli in Syrien,” *Zentralblatt der Bauverwaltung* 83 (1908), 553. “Die Bagdadbahn, zu deren Aufgaben auch die wirtschaftliche Erschließung Syriens und Mesopotamiens gehören wird, soll unsere Kultur in ein Land bringen, das einst auf einer weit höheren Bildungsstufe als Europa stand. Wer das Land bereist, kommt an außerordentlich vielen Hügeln, arabisch ‘tell’ genannt, vorbei, und wenn er nicht gerade Trümmer von Bauwerken findet, ahnt er meistens nicht, daß unter diesen grasbewachsenen Hügeln alte Kulturstätten begraben sind, unter Schutt und Erde. Die Hügel, deren wenige nur einen Felskern enthalten, sind dadurch

How and who exactly was to bring German culture to the Baghdad railway corridor and why, ultimately, was the effort worth it? Some answers lie in Jacoby's hint that the peculiar mounds of southern Anatolia represented an old cultural florescence. The dormancy that follows will, Jacoby suggests, be aroused by the reawakening of the lands from obscurity through rail. This motif of a "slumbering" nation and a penetrative, awakening rail is one that repeats itself across a broad array of literature, and archaeology is readily allegorized as a symbol of Ottoman dormancy.

Carl Humann and his protégé Felix von Luschan (1854–1924), an Austrian-born anthropologist, archaeologist, and ethnographer, were the first to discover the site sometime in 1888, well before the railway expeditions would cover the area.⁶⁵ In that year they conducted an initial study, before Koldewey and von Luschan took over the excavation and conducted two more digs in 1890 and 1891.⁶⁶ Von Luschan took full responsibility for the site from 1893 onward, bringing to full fruition the importance of the historically layered site, which over centuries morphed under Yamhad, Hittite, Neo-

entstanden, das ein Kulturabschnitt nach dem anderen aufblühte, um mit Feuer und Schwert vernichtet zu werden. Die Mauern aus ungebrannten Ziegeln zerfallen, nachdem ihre Holzteile verbrannt oder verkohlt sind, die Reste bilden einen flachen Schutthaufen und werden wieder zu Lehm und Erde. So wuchsen Schicht auf Schicht die Hügel durch Jahrhunderte, wenn nicht gar Jahrtausende."

⁶⁵ Von Luschan's work on Asia Minor spans 1884 to 1899, at which point he switched his research area to Benin, although he would ultimately return to writing about Anatolia. Prior to his work at Sam'al, Luschan studied the flora and fauna of Lycia, Caria, and Mesopotamia. See Otto Stapf, *Beiträge zur Flora von Lycien, Carien und Mesopotamien: Plantae collectae a Dre. Felix Luschan ann. 1881, 1882, 1883* (Vienna: K. K. Hof- und Staatsdruckerei in Kommission bei A. Hölder, 1885).

⁶⁶ The results of the work of these years are published in *Orient-Komitee*, Berlin [Felix von Luschan, Eberhard Schrader, Eduard Sachau, Carl Humann, Robert Koldewey, Gustav Jacoby], *Ausgrabungen in Sendschirli* (Berlin: W. Spemann, 1893).

Hittite, Aramaic, and Neo-Assyrian tutelage.⁶⁷ The site was eventually placed under the auspices of the DOG and the Berlin Museums. The maps produced by the Stemrich expedition, dated approximately 1902 and now held by the Deutsche Bank archives, show the site of “Sendjir” located roughly two miles east of the Baghdad Railway’s trace near Fevzipaşa, with no notation designating it as an archaeological site, despite the fact that this would undoubtedly have been known [Fig. 4.21].

As Marchand has noted, von Luschan epitomized the type of scholar Berlin dispatched to the sites of Mesopotamia and southern Anatolia: “more a prehistorian with natural-scientific training” than a classical archaeologist.⁶⁸ What was different about von Luschan, however, was the simultaneity of his ethnographic and archaeological work, which have stunning parallels to Strzygowski’s *Orient oder Rom* treatise, presaging (and perhaps informing) the work. Nurtured by his studies in medicine and anthropology as well a stint as assistant director at the ethnological museum (Königliches Museum für Völkerkunde) in Berlin under the direction of Adolf Bastian (1826–1905), von Luschan brought with him to southern Anatolia and Syria a profound interest in the nature of race in Asia Minor, and he used his archaeological travels there to this end, publishing with Eugen Petersen (1836–1919), a Hamburg archaeologist, the fascinating *Reisen in Lykien, Milyas and Kibyratis* in 1889. Von Luschan’s chapter “Anthropologische Studien” is

⁶⁷ The finds from the later years were posthumously published in Felix von Luschan and Walter Andrae, *Die Kleinfunde von Sendschirli* (Berlin: Walter de Gruyter, 1943). An excellent overview of the entire site can be found in Ralf B. Wartke, *Sam'al: Ein aramäischer Stadtstaat des 10. bis 8. Jhs. v. Chr. und die Geschichte seiner Erforschung* (Berlin: Staatliche Museen zu Berlin, 2005).

⁶⁸ Marchand, *Down From Olympus*, 213.

perhaps his most significant early writing and reveals a certain agenda.⁶⁹ His overarching anthropological thesis was that Asia Minor and Syria had a pre-Greek indigenous, “Armenide” population whose most salient characteristics were their wide-ranging skull shapes, from the extremely short to the remarkably attenuated⁷⁰ [Fig. 4.22]. At Sam’al and in other places under other theses, von Luschan sought to prove this thesis by carefully analyzing the shapes of heads in figurative sculptures [Fig. 4.23]. Indeed, there are striking similarities between his methods of documenting locals, photographed frontally and in profile [Fig. 4.24], and the way in which he documented heads at Sam’al as well as in his later documentation of bronze head sculptures in Benin⁷¹ [Fig. 4.25]. Von Luschan contended that the Armenide race of the region around Sam’al, representing the Bronze Age’s most magnificent and prolific artistic community, remained relatively homogenous as a result of its religious, linguistic, and political isolation and that the skeletal traits of members of this race, which came to distinguish both the Greek and the Turkish races, identify them as the forebears of the classical ideal as well as the Muslim Turk.⁷² The skeletally different population of Lycia, on the other

⁶⁹ Felix von Luschan, “Anthropologische Studien,” in *Reisen in Lykien Milyas und Kibyratiss*, eds. Eugen Petersen and Felix von Luschan (Vienna: Carl Gerold, 1889). Von Luschan’s later studies theorized and categorized race more widely and were used in the development of some eugenics theory in Nazi Germany, although von Luschan’s work in and of itself is outwardly devoid of hegemonic concepts of superior and inferior races. See Felix von Luschan, *Völker, Rassen, Sprachen* (Berlin: Welt Verlag, 1922).

⁷⁰ Von Luschan, “Anthropologische Studien.” Gülru Necipoğlu has demonstrated how the study of the human skull was also a motif in the early Republican period, noting how the Turkish History Society unearthed the grave of the acclaimed Mimar Sinan in order to measure his skull and confirm his ethnicity, towards nationalistic ends. See Gülru Necipoğlu, “Creation of a National Genius: Sinan and the Historiography of ‘Classical’ Ottoman Architecture,” *Muqarnas* 24 (2007): 167.

⁷¹ Felix von Luschan, *Die Altertümer von Benin* (Berlin: Vereinigung wissenschaftlicher Verleger Walter de Gruyter, 1919.)

hand, represented a group unconnected to the florescence evident at Sam'al but rather a fusion of Greek immigrants and others with eastern Semitic roots⁷³ [Fig. 4.26]. Yet others who fit neither the Armenide nor Lycian skeletal models were likely descendants of nomadic groups originating either from Mongolia⁷⁴ [Fig. 4.27] or from India (namely, Gypsies).⁷⁵ [Fig. 4.28]

4.6 Tell Halaf

While von Luschan was excavating Sam'al in 1899, Max von Oppenheim was unearthing another type site, due east along the railway's trace. The site was Tell Halaf, then the first known Neolithic settlement, later reestablished as the Aramaic city-state of Gozan around 6000 BC.⁷⁶ The sculptural programs of Tell Halaf mounds and architectural fragments were dazzling figurative manifestations of Aramaic folk culture and prophecy and revealed a society flourishing in the plastic arts. Located on the

⁷² Von Luschan, "Anthropologische Studien," 212.

⁷³ Ibid.

⁷⁴ Felix von Luschan, "Kysyllbasch- und Jürükendörfer in der Gegend von Turkmendag," *Zeitschrift für Ethnologie* 37 (1905): 197.

⁷⁵ Felix von Luschan, "Wandervölker Kleinasien: Verhandlungen der Berliner Gesellschaft für Anthropologie," *Ethnologie und Urgeschichte* (1886): 168. Von Luschan continued his research into racial groups and in 1897 developed a chromatic scale of 36 shades of human skin color that he superimposed over a map of all human civilizations. See Felix von Luschan, *Beiträge zur Völkerkunde der Deutschen Schutzgebiete* (Berlin: Reimer, 1897) as well as Felix von Luschan, *Völker, Rassen, Sprachen: Anthropologische Betrachtungen* (Berlin: Welt, 1922).

⁷⁶ These are the correct pronouncements made in Oppenheim's first publication on the site (about three decades after its "discovery"); Max Freiherr von Oppenheim, *Der Tell Halaf: Eine neue Kultur im ältesten Mesopotamien* (Leipzig: F. A. Brockhaus, 1931; repr. Berlin: de Gruyter, 1966).

southern bank of the Khabur River in the sanjak of Zor, Tell Halaf, like Gordium, lay in one of the most sparsely populated districts of the empire and at the approximate confluence of more settled Turkic populations to the north and nomadic Arab populations to the south.⁷⁷

Von Oppenheim first encountered the site while on his first research trip to inner Anatolia and Syria in 1890.⁷⁸ He traveled to the site again in 1899 with his secretary Heinrich Hänichen, sketching a number of sites and inscriptions in the area along the way.⁷⁹ The most beautiful of his studies are those of Viranşehir (literally “ruined city” in Turkish), which depict a partially ruined Armenian church that transposes von Luschan’s interest in the Armenide people into an interest in an indigenous and perhaps artistically autonomous Armenide architecture, so to speak.⁸⁰ Working with Hänichen and with financial support from the Baghdad Railway Company⁸¹, Oppenheim draws a plan of the church and interprets the rest of the structure from the nature of that which is extant [**Fig. 4.29**] as well as some remaining architectural details [**Figs. 4.30–4.31**].

In a series of memoirs written in 1900 while he worked at Tell Halaf, Oppenheim expounds upon German developmental concerns in Turkey and their relationship to the Baghdad Railway. In a section entitled “Concerning the Hamidiye regiments in Upper

⁷⁷ For an evaluation of the tribal and racial composition of Zor, see J. C. Wilkinson, “Nomadic Territory as a Factor in Defining Arabia’s Boundaries,” in *The Transformation of Nomadic Society in the Arab East*, eds. Martha Mundy and Basim Musallam (Cambridge: Cambridge University Press, 2000), 44–62.

⁷⁸ SoHA Oppenheim Nachlass MvO Nr. 1/3.

⁷⁹ SoHA Oppenheim Nachlass MvO Nr. 100.

⁸⁰ This would be a main tenet of Strzygowski’s *Orient oder Rom*, which was published very shortly thereafter. It is unclear whether Strzygowski was aware of von Oppenheim’s accounts.

⁸¹ McMeekin, *Berlin-Baghdad Express*, 45.

Mesopotamia and on the slope of the Kurdish mountains and their significance for the Baghdad Railway,” Oppenheim argues that the development of culture is embedded in the laying of rail, noting:

I believe that in Mesopotamia and its surroundings the possibility for the extension of culture is quite viable [through] human resources. It will help at the beginning for state power to demonstrate goodwill and then later secure the conditions and the rich proceeds of agriculture through [the work of] immigrants from the Asiatic Turkey and Arabia who would naturally develop the population and agriculture, because even in spite of difficult [group] relationships, it has already been shown that [these groups] are extraordinarily capable of production, and that prosperity can multiply rapidly and significantly. The government has already sought to pacify the Mesopotamian nomads for a number of years. Their own interests will be served by railway construction as a result of this, and the introduction of the railway in the country will enhance transport and the [region’s] working culture. Culture is the creation of order and security and is reflected in the agriculture that industry and trade enable. Up until now the landscape has been composed of semi- and actual Kurdish, Arab, and other tribal [nonagricultural] businesses and it is believed that this might make the civilizing work of Hamidiye [sic] regiments impossible or more difficult. On the contrary, I believe that railway construction will inversely increase the resumption of agriculture that will take form over fertile plains of Mesopotamia.⁸²

Sometime in 1898 or early 1899 the Baghdad Railway Company, preparing in earnest for the extension of the railway line from Konya to Baghdad, called on Oppenheim to assist in the surveying of the railways, where his experience with Bedouins

⁸² SOHA Oppenheim Nachlass MvO Nr. 33, 40–41. “So glaube ich denn, dass in Mesopotamien selbst und seiner Umgebung für die dort zur Verfügung stehenden ausgedehnten, der Kultur neu wieder zu gewinnenden, ganz ausserordentlich entwicklungsfähigen Gebiete genügendes Menschenmaterial vorhanden ist. Im Anfange werden Machtmittel und staatliche Bevormundung dem guten Willen nach helfen müssen, später aber werden die gesicherten Verhältnisse und die reichen Erträge des Ackerbaues von selbst Einwanderer aus der asiatischen Türkei und Arabien heranziehen und naturgemäß würde die neue Ackerbau treibende Bevölkerung, deren Elemente sich trotz der schwierigen Verhältnisse bisher schon als ausserordentlich produktionsfähig gezeigt haben, bei steigendem Wohlstande sich rasch und bedeutend vermehren. Die Regierung hat seit einer ganzen Reihe von Jahren bereits sich um Pacificierung der mesopotamischen Nomaden bemüht. Ihre eigensten Interessen werden infolge des Bahnbaues al[le]s das bringen, und die durch die Bahn der Lands gebrachten Konfiskations- und Verkehrsmittel und die sich arbeitende Kultur[?]. Kultur wird die Schaffung von Ordnung und Sicherheit erleichtern die nieder Ackerbau, Industrie und Handel ermöglichen wird. Die bis jetzt aus halb oder ganz geschafften Kurden, Arabern und anderen Stammesteilen zusammengesetzten Hamidiye Regimenter werden dieses civilisatorische Werk nicht aufzuhalten oder ihm besonders Schwierigkeiten zu machen im Stande sein. Im Gegenteil, ich glaube, dass sie ein fördernder Faktor für den Bahnbau und die Wiederaufnahme des Ackerbaues in den heute noch öden, über fruchtbaren Ebenen Mesopotamiens bilden werden.”

would be particularly useful. Beyond some challenges in traversing the Tigris and Euphrates Rivers, the stretch is largely flat and easy to build and is thus significantly longer than the other administrative sections. Von Pressel's tracings indicate a favored route directly from Şanlıurfa to Mardin, an important regional city. There is no record indicating why Oppenheim ultimately suggested a route that did not go through Mardin, but it likely had something to do with the fact that Mardin's extreme topography proved problematic for a section that was supposed to be erected cheaply and quickly.

This may indicate why Oppenheim proposed a southerly route, one that brought him to Tell Halaf. Tell Halaf had only a very small population of its own at the time, but it lay very close to the medium-sized Arab settlement of Ras al-Ain (Ras al-Ayn). A map of the area executed by Holzmann engineers is highly suggestive. Presumably drawn with information provided by von Oppenheim himself, the map omits the siting of the Aramaic city [Fig. 4.32]. This is not because archaeological sites were simply not included, as one can see directly to the north of Tell Halaf a notation indicating the presence of the ancient city of Theodosiopolis, which had attracted the interest of the British since the 1860s.⁸³ Also notated is a dotted north-south line identified, in French, as the "junction of the ancient northerly road," presumably referring to an important north-south trade route connecting Anatolia with Arabia. Certainly Oppenheim and his surveyor colleagues would not have failed to notice that the ancient city of Tell Halaf sat on a hill hovering above that junction, on its eastern edge. The omission, like that at Gordium, appears intentional. But why then were ruins notated at all, as had been done

⁸³ The first mention of ruins in the region come from the British traveler J.G. Taylor in "Journal of a Tour in Armenia, Kurdistan, and Upper Mesopotamia," *Journal of the Royal Geographic Society* 28 (1868): 281–361.

with Theodosiopolis just a kilometer away, and what purpose would the selective annotation serve? The choice to notate Theodosiopolis was, in all likelihood, a codified way of noting territory under rival control. German excavation sites or unclaimed ruins tended to be drawn as dots and lines in an open field of cartographic space. Here Theodosiopolis was marked in bounded, shaded space, as if to suggest a garrison or fortified city-state.

Unlike the tenuous sequence of archaeological and railway events at Gordium, Tell Halaf was undisputedly seen by Western eyes and brought to international academic attention as a result of the railway's construction.⁸⁴ Upon encountering Tell Halaf in 1899, Oppenheim notified a host of relevant parties in Berlin of its existence, and its presence was made public shortly thereafter.⁸⁵ Oppenheim returned to Tell Halaf in 1911 with a massive team and sophisticated equipment.

Seeking to establish a major permanent installation at the Berlin Museums with the finds from the Tell Halaf site, von Oppenheim wrote to Wilhelm von Bode (1845–1929), curator at the Kaiser Friedrich Museum, on February 24, 1912, evoking an image of a thoroughly modern excavation site, replete with *Feldbahnen* (short-distance trains to

⁸⁴ Von Oppenheim's collected findings on Tell Halaf were eventually published in Max Freiherr von Oppenheim, *Der Tell Halaf: Eine neue Kultur im ältesten Mesopotamien* (Leipzig: F. A. Brockhaus, 1931).

⁸⁵ Von Oppenheim's trip through the Ottoman empire began on October 3 in Hamah and ended on December 29 in Konya, crisscrossing the empire and extending as far east as Diyarbakır. Hänichen took most of the notes on the trip and subsequently typed them up and sent a copy to Berlin. Von Oppenheim and Hänichen arrived in Ras al Ayn on November 19 and described its rectangular city plan and clay buildings. The following day, they arrived at Tell Halaf and documented its ruins extensively, in all likelihood spending more time there than anticipated (11 days). While the section of notes on Tell Halaf is largely descriptive, it does make some reference to the probable weight of the stones and their capacity for transport, which indicates that they were already being considered as part of the railway project. SOHa Max von Oppenheim Nachlass, MvO Nr. 51, Band II, 93–160.

move heavy items), busy workers, and the most modern of archaeological technology.⁸⁶

This image attempts to buttress von Oppenheim's scientific competence and proffer good reason to place Tell Halaf prominently in the imperial showcase being planned for Museum Island. Von Oppenheim argued:

With such a wealth of well-preserved stone reliefs in my additional findings, it would really be a crying shame if everything were to go to Constantinople. I certainly hope that our home museums will have their share of the results of my work.⁸⁷

Greater than the sum of the technical achievements of its constitutive parts, the photographs and texts from Tell Halaf unite the activities of spade and gauge as a single, preferably indivisible, imperial cultural achievement. Tell Halaf was notable as one of the most well-funded digs of its day. Photography played a major role in the process, so much so that a darkroom was set up in the "expedition house" to record and conduct visual analyses of the specimens [Fig 4.33]. Unlike Berggren's photographs from the sites around Konya, von Oppenheim's photographs from Tell Halaf convey a touristic jubilation, focusing on personalities, social relations, and the actual act of digging as much as they do the actual objects. Perhaps most importantly, the photos from Tell Halaf (which are archived fully by the bank Sal. Oppenheim in Cologne) interweave the railway's role in the dig with the greater scientific meaning of the Tell Halaf project. In addition to showing the Ras al'Ain train station, the photographs document the lives of

⁸⁶ SOHA, Oppenheim Nachlass, MvO Nr. 229. The cost of the *Feldbahnen*, which connected to the Baghdad railway, is documented in SOHA, Oppenheim Nachlass MvO Nr. 56 as 3,794 marks.

⁸⁷ Max von Oppenheim to Wilhelm von Bode, Tell Halaf via Aleppo, February 24, 1912, SOHA, Oppenheim Nachlass, MvO Nr. 229. "Bei der großen Anzahl gut erhaltener Steinbilder meines Teils und den übrigen Funden, wäre es wirklich ein schreiendes Unrecht, wenn alles nach Konstantinopel käme. Ich hoffe ganz bestimmt, dass auch unsere heimischen Museen ihren Anteil an den Ergebnissen meiner Arbeiten haben werden." Von Oppenheim eventually established a museum with the finds from Tell Halaf independent of the state museums.

the railway workers and their tent camps, the comings and goings of building materials, important railway executives, the laying of track, and the expedition house [Fig 4.34]. One image at the city of Hammam shows four Baghdad Railway engineers and possibly Oppenheim reclining in front of a tent in a workers' tent camp [Fig. 4.35]. Another image shows the utter isolation of the pristine new station at Bir Scheban, glowing against the backdrop of the Tektek mountains [Fig. 4.36]. Yet another image depicts an entourage of fourteen men that appears to consist exclusively of Germans from Oppenheim's team and the railway engineers, gathered for an evening of merriment in a tent at Djirdjib [Fig 4.37]. Another image depicts Oppenheim's expedition houses with Baghdad Railway workers' tents discernible in the immediate background, testifying to their proximity [Fig 4.38].

With the advent of the war and the accompanying need to suspend the dig, von Oppenheim had originally temporarily ceded the facilities to Foellner and the Baghdad Railway, who he believed would be the best custodians of the site during wartime. According to Foellner, Ottoman officials seized von Oppenheim's base camp sometime in May of 1916.⁸⁸ Von Oppenheim wrote an impassioned and futile plea to the minister of the interior, Talat Bey (1874—1921), asking him to kindly cease and desist and return the site to Foellner because of Foellner's need for the facilities and German wartime operations, a barely cloaked way of expressing his distrust of the Ottoman army.⁸⁹ While

⁸⁸ Max von Oppenheim to Talat Bey, Pera, May 10 1916, BOA 64/45, 2–3.

⁸⁹ Ibid. “Je me suis permis de remettre à Votre Excellence un télégramme dans lequel monsieur Foellner, l'ingénieur en chef de la Compagnie de construction du chemin de fer de Bagdad à Alep m'a informé que les autorités militaires avaient occupé quelques chambres dans mon Installation que j'avais construite à Tell Halaf et où se trouvent encore les objets de mon expédition m'appartenant ... ainsi que les résultats de mes excavations scientifiques.... Monsieur Foellner m'a déjà écrit antérieurement, que cette installation lui est devenue indispensable pour la

von Oppenheim would ultimately recover his finds, his mission at Tell Halaf was marked by a sense of authority over the Ottoman agencies and people with whom he necessarily engaged, and this perceived authority was buttressed and exaggerated by the interdependency of his archaeological ambition and the on-the-ground reality of the construction of the railways winding their way through his site to Baghdad.

4.7 Gottlieb Schumacher and Mshatta

In the process of surveying the railways of Palestine, Gottlieb Schumacher also discovered, led and assisted with a number of important archaeological projects. This included the Canannite site Tell Meggido (Tell al-Mutesellim, also known as “Armageddon”), which he excavated, with financial backing from the DOG and additional private sources, from 1903 to 1905. One of Schumacher’s earliest informal sketches of the site notes its close proximity to the railway [Fig. 4.39].

Schumacher played a key role in the excavation, deconstruction, and shipping of a particularly magnificent façade: the delicately carved main portal of the never-completed Umayyad palace of Qasr Mshatta.⁹⁰ He functioned as a contract employee for the Berlin

continuation de ses travaux, qui seront d’une utilité extrême dans cette guerre.” (I hereby submit to your Excellency a telegram I have received from Sir Foellner, chief engineer of the company building the railway from Baghdad to Aleppo, who has told me that the military authorities have occupied a few rooms in the installation I have built at Tell Halaf and where one still finds objects belonging to me ... my shipments and the results of my scientific excavations.... Mr. Foellner already wrote to me earlier that this facility has become essential for the continuation of his work, which is of extreme use in this war.)

⁹⁰ See Volkmar Enderlein, “Mshatta—A Caliph’s Palace,” *The Pergamon Museum Information Leaflet* no. ISL I (Berlin: Staatliche Museen zu Berlin, 1996) and Volkmar Enderlein and Michael Meinecke, “Graben, Forschen, Präsentieren: Probleme der Darstellung vergangener Kulturen am Beispiel der Mshatta-Fassade,” *Jahrbuch der Berliner Museen* 34 (1992): 137–72. The façade is the subject of a considerable amount of literature. In the context of its cultural impact in Germany

museums and liaised with Meißner, the DOG, and the architect in charge of disassembling Mshatta's façade, Bruno Schulz (1865–1932). The Qasr Mshatta site lay 12 miles south of Amman and was directly adjacent to the Hejaz Railway construction efforts in the area [Fig. 4.40]. Schumacher and Bode began corresponding on the matter in February 1902, when Schumacher assured Bode that, although he was busy on the construction of the Haifa-Damascus railway and a Russian hospice in Nazareth, he was loyal and would be glad to participate. He explained to Bode that the variety of transport options to the site might be worth noting, in particular, the advantageous role the Hejaz Railway could play in the successful removal of the stones.⁹¹

Richard Schöne (1840-1922), then director of the state museums, officiated Schumacher's involvement in the Mshatta project, routing a letter to Otto Puchstein (1856-1911), the classical archaeologist then stationed at Baalbek, conveying Kaiser Wilhelm's desire, upon seeing the Mshatta drawings executed by Schulz, to have the men collaborate in the removal and delivery of the façade.⁹² In May, the possibility that the Sultan would dedicate the stones to the Kaiser became increasingly likely, and Schöne liaised with the German embassy in Istanbul to try to ensure that the authorities at the Porte would have whatever they needed to issue the necessary *irade*.⁹³ Julius Euting

see the thread of discussion around in Marchand, *German Orientalism*. Concerning its art historical meaning, see Oleg Grabar, "The Date and Meaning of Mshatta," *Dumbarton Oaks Papers* 41 (1987): 243-47; Avinoam Shalem, "Histories of Belonging and George Kubler's Prime Object," *Getty Research Journal* 3 (2011): 1-14, and a forthcoming manuscript from Eva Maria Troelenberg.

⁹¹ Gottlieb Schumacher to Wilhelm von Bode, tent camp near Tell Ta 'annek, March 17, 1902, SMPK I/IM 006.

⁹² Richard Schöne to Otto Puchstein, Berlin, May 23, 1902, SMPK I/IM 006.

⁹³ Richard Schöne to Gottlieb Schumacher, Berlin, May 24, 1902, SMPK I/IM 006.

(1839–1913), the orientalist and director of the Universitätsbibliothek Strasburg's Zentrum für Orientforschung, actively wished to be involved with the removal of the Mshatta façade from Jordan, in large part because he seemed not to trust Schumacher in his capacity as a mere engineer. Schöne, sensitive to leaving Schumacher unperturbed, disagreed. He noted:

Confidentially, I add that Professor [Julius] Euting has a strong desire to go along in obtaining the monument and has very actively advocated for this with the governor, claiming that the Kaiser has approved it. His involvement, in all actuality, would probably not be necessary. But it will probably not hurt; hopefully it is not undesirable to Dr. Schumacher.⁹⁴

He went on to state:

Euting seemed to regard the ruin as unfinished, which had never been much more of a building than what one sees now. You shall see whether that's right or whether there is debris stuck in the sand, at which point you may also have to proceed to excavations. Meanwhile, better is the enemy of good, and you will at the very least place the emphasis on the recovery of what is on [and above the] earth. Should you unexpectedly come to the conclusion that the [stones] could not be transported as original, then so would it be desirable to prepare plaster castings in all possible instances.⁹⁵

Schöne was clearly cognizant of the above/beneath the earth distinction engendered by the antiquity laws. While he did not exclude the possibility of digging into the earth, he was also aware of the knotty issues that doing so might cause. In advocating for the possibility of plaster casts, Schöne also signaled, if only momentarily, that it was the *form* of the

⁹⁴ Ibid., 17. "Vertraulich füge ich hinzu, dass Professor Euting, wenn er zur Abholung des Monuments kommt, den dringenden Wunsch hat, mitzugehen, dass der Statthalter diesen Wunsch sehr lebhaft befürwortete und dass der Kaiser ihn genehmigte. Nöthig [sic] wäre seine Betheiligung [sic] wohl nicht. Aber sie wird ja wohl auch nicht schaden; hoffentlich ist sie Herrn Dr. Schumacher nicht unerwünscht."

⁹⁵ Ibid., "Euting schien mir die Ruine als einen unvollendeten Palast aufzufassen, der nie viel weiter im Bau gelangt sei als bis zu dem jetzt erhaltenen Zustand. Sie werden ja sehen, ob das richtig ist oder ob noch Trümmer im Sande stecken und man ev. auch zu Ausgrabungen schreiten müsste. Indessen ist das Bessere der Feind des Guten und wird man immerhin das Hauptgewicht auf die Gewinnung dessen legen müssen, was über der Erde ist. Sollten Sie wider Erwarten zu dem Ergebniss kommen, dass man die Originale nicht transportiren [sic] könne, so wäre dann ein Anschlag für Herstellung eines Gipsabgusses sehr erwünscht, der vielleicht für alle Fälle zweckmäßig beizufügen wäre."

stones that was valuable, and not their actual acquisition, an argument that expressed a bias that was more art historical than it was imperialist.

Puchstein traveled to Haifa and met Schumacher in July, and the men and their staffs then proceeded to Mshatta, where Schumacher measured, analyzed, and drew the prized façade⁹⁶ [Fig 4.41]. Puchstein speculated upon arrival at the site that the engineers of the Hejaz Railway could assist in the expropriation of the Mshatta stones if they were to build a station at the point where the railway was perpendicular to the excavation site, a station that had not been planned and that would ultimately never materialize.⁹⁷ Schumacher, expressing a certain amount of anxiety that the slow progress of the Hejaz railway would not place it at the disposal of transport needs in time, began to explore alternative options, including transporting the stones on the backs of camels through Palestine.⁹⁸ Schumacher praised the efforts made by Nazim Pasha (r. 1897–1906), the general governor of Damascus, to ensure that the stones were protected by local guards while awaiting removal.⁹⁹

The planned removal of the stones, although given the Sultan's blessing, was nonetheless not lost on the Ottoman cultural elite, specifically, Osman Hamdi. In September of 1902, Wiegand relayed Osman Hamdi's (undue) discomfort with the situation at Mshatta:

The evacuation of the pieces of Mshatta could not possibly be looked upon as a personal

⁹⁶ SMPK I/IM 006.

⁹⁷ "Auszug aus einem Schreiben des Professors Puchstein, Djerash," July 16, 1902, SMPK I/IM 006.

⁹⁸ Gottlieb Schumacher to Richard Schöne, Haifa, September 17, 1902, SMPK I/IM 006; Gottlieb Schumacher to Richard Schöne, Haifa, September 25, 1902, SMPK I/IM 006.

⁹⁹ Gottlieb Schumacher to Richard Schöne, Haifa, March 6, 1903, SMPK I/IM 006.

insult by Hamdy [sic] Bey, namely a) because we have officially received the permission from him to secure a still-to-be precisely named monumental portal ornament for us in Syria; this point was specifically included in the List of Antiquities, which I had asked for as a commemorative gift for His Majesty the Emperor and King for his journey to Palestine, which he had conceded to and b) because Mister Privy Council Bode, as a sign of gratitude for the concession of the find, immediately afterwards bought an oil painting painted by Hamdy himself for 6000 francs.¹⁰⁰

Bode's symbolic purchase of Hamdi Bey's oil painting was a telling indication of how the Berlin cultural machine believed it could placate even the most conscientious and erudite of the İstanbul cultural elite and also indicated that no gesture—symbolic or otherwise—would be spared to streamline the process of extricating desired goods in the wake of the special antiquities arrangements between the Sultan and the Kaiser.

Noting in May 1903 the considerable progress in the construction of the Hejaz Railway, then under the leadership of Meißner, and upon receiving confirmation from the Catholic mission at Ziza adjacent to the railway that it would in fact be ready, Schumacher retracted his discouragement of using the railway for the Mshatta's removal and suggested that it might, in fact, be the least problematic way to extract the stones, in part because it would draw the least amount of attention to the removal.¹⁰¹ Indeed stones being transported swiftly by locomotive sounded like a better idea than stones slowly crossing the Negev on the backs of camels. The stones would first travel north to

¹⁰⁰ Theodor Wiegand to the Kaiserliche Botschaft, Therapia, Constantinople, September 17, 1902, SMPK I/IM 006. "Die Fortführung der Stücke von Meschatta [sic] würden von Hamdy Bey nicht wohl als seine persönliche Kränkung angesehen werden können, und zwar a) weil wir die Erlaubnis von ihm offiziell erhalten haben, einen noch näher zu bezeichnenden monumentalen Portalschmuck in Syrien für uns zu sichern; dieser Punkt war ausdrücklich in der Liste der Alterthümer [sic] enthalten, die ich als Erinnerungsgabe an die Palästinafahrt seiner Majestät des Kaisers und Königs erbeten und die er mir concediert hatte. b) weil Herr Geheimrat Bode aus Erkenntlichkeit für Concedierung dieser Fundstücke ihm gleich darauf ein von Hamdy selbst gemaltes Oelbild für 6000 frcs abgekauft hat."

¹⁰¹ Gottlieb Schumacher to Richard Schöne, Tell el Mutesellim (Tell Megiddo), May 17, 1903, SMPK I/IM 006; Dr. Gröte to Richard Schöne, Göttingen, May 27, 1903, SMPK I/IM 006.

Damascus before proceeding onward to Haifa, whence they would be shipped to Hamburg via the Mediterranean and then the Atlantic. Wiegand, the unofficial liaison between the museum world and the Ottoman railways, assured Schumacher that Meißner and his team were on board and would help in every way necessary.¹⁰² Despite some small delays in the Hejaz Railway's construction, Schumacher and Puchstein were nevertheless delighted when the *irade* was made official in June of 1903.¹⁰³ But their enthusiasm was dampened two days later, when it was made known by Hans Freiherr von Wangenheim (1859–1915), the German ambassador in İstanbul, that having seen Schumacher's photographs of Mshatta, Hamdi Bey was seeking ways to stall the removal of the stones.¹⁰⁴ As a result, the Ministry of Spiritual, Teaching, and Medical Affairs (Der Minister der geistlichen, Unterrichts- und Medizinal- Angelegenheiten) decisively canceled plans for a (not yet selected) gift that it had been considering for Hamdi Bey and the imperial museum in return.¹⁰⁵

Schumacher was nonetheless unable to terminate his ties to London and spoke candidly to his British friends and colleagues about his new role, expressing his own doubt that the Hejaz Railway, and Meißner's construction of it, ever really had anything to do with the holy pilgrimage. A British acting vice counsel, Abela at Haifa, reported, "I

¹⁰² Theodor Wiegand to Richard Schöne, Constantinople, May 30, 1903, SMPK I/IM 006.

¹⁰³ Gottlieb Schumacher to Richard Schöne, Haifa, June 15, 1903, SMPK I/IM 006.

¹⁰⁴ Hans Freiherr von Wangenheim to the Generalverwaltung der Königlichen Museen Berlin, Therapia, June 17, 1903, SMPK I/IM 006.

¹⁰⁵ Blum to the Generalverwaltung der Königlichen Museen, Berlin, July 4, 1903, SMPK I/IM 006. "Die Generalverwaltung der Königlichen Museen setze ich hiervon mit dem Bemerken in Kenntnis, daß das früher angeregte archäologische Gegengeschenk für Hamdy [sic] Bey jetzt nicht mehr in Betracht zu kommen scheint." (To the General Administration of the State Museums I note that the previously mentioned archaeological gift to Hamdy Bey is no longer up for consideration.)

understand also from Dr. Schumacher that the Hejaz line is a purely strategical [sic] one. He does not believe that the line will ever reach Mecca.”¹⁰⁶ However, Schumacher’s own suspicion that the Hejaz Railway might simply have been a German colonial project masquerading as a project of friendship between Germany and the Ottoman empire did not prevent him from entering the fold of the Mshatta’s removal, where strategic cultural intentions were far more obvious than of the intentions for the Hejaz Railway. Berlin knew that it wanted Mshatta extricated, and the logistic and diplomatic facilitation of that desire hinged on the ability of Schumacher and his colleagues to carefully choreograph it with the synchronic railway construction.

The extent to which Schumacher, Puchstein, Meißner, and all the other Germans on the ground in 1903 did or did not have to inform or otherwise engage the Ottoman authorities with the details of Mshatta’s removal was, however, something of a mystery, even to them. Meißner delicately indicated in July 1903, that he did not believe that İzzet Pasha needed to be consulted about how and when the stones, which were almost completely dismantled and crated, would be transported out of the desert.¹⁰⁷ Schumacher, for his part, spent his days still wrangling the pros and cons of rail versus camel transport, crunching the numbers and determining that the transport of the 200 tons of stones out of the desert would cost, altogether, 21,000 francs compared to the 18,050 francs it would take to transport the stones by camel.¹⁰⁸ Schulz, directing the packing and loading of the

¹⁰⁶ Acting Vice Consul Abela to Consul-General Drummond-Hay, Haifa, June 20, 1902, NA FO 78/5452.

¹⁰⁷ Theodor Wiegand to Richard Schöne, Constantinople, July 27, 1903, SMPK I/IM 006.

¹⁰⁸ Gottlieb Schumacher to Richard Schöne, Haifa, August 2, 1903, SMPK I/IM 00; Gottlieb Schumacher to Richard Schöne, Beirut, August 3, 1903, SMPK I/IM 006.

stones onto camels, nevertheless convinced Schumacher that rail transport was safer, and Wiegand negotiated a price for the stones' transport with the Hejaz and Haifa railway authorities.¹⁰⁹ Schumacher provided additional insight into the incredibly complex orchestration of rail and dismantling when he enumerated for Schöne the constellation of key players who were to be formally recognized for their service: Nazim Pasha, General Kazim Pasha, the general director of the Hejaz Railway in Damascus, Meißner, Munir Bey Süleh (fl. 1900–1905), the imperial commissar specially assigned to the Mshatta project, Reverend Perè Manfredi from the monastery at Madaba, and General Consul Paul Schröder (1844–1915) in Beirut.¹¹⁰

As the stones were finally leaving the desert in December 1903, Schumacher ambivalently made note of how the entire affair deeply aggravated Osman Hamdi:

The donation of the stones of Mshatta have deeply upset his excellence Hamdi Bey, Director of the Constantinople Museums, and unfortunately he is also quite sensitive about the excavations of the German's Palestine Society at Tell el Mutesellim (Megiddo), which I lead.¹¹¹

Osman Hamdi's aggravation was indeed not unfounded, particularly on an art-historical register. As Oleg Grabar has noted, Herzfeld's interpretation of Mshatta, first published as "Die Genesis der islamischen Kunst und das Mshatta-Problem," (The Genesis of Islamic Art and the Mshatta Problem) in *Der Islam* (1910), gave the definitive interpretation of the palace and its elements and, in the process, reified Mshatta above all

¹⁰⁹ Gottlieb Schumacher to Richard Schöne, Haifa, August 15, 1903, SMPK I/IM 006.; Bruno Schulz to Wilhelm von Bode, Baalbek, August 15, 1903, SMPK I/IM 006; Theodor Wiegand to Generalverwaltung der Königlichen Museen Berlin, Milet, September 3, 1903, SMPK I/IM 007.

¹¹⁰ Gottlieb Schumacher to Richard Schöne, Haifa, October 14, 1903, SMPK I/IM 007.

¹¹¹ Gottlieb Schumacher to Richard Schöne, Haifa, December 1, 1903, SMPK I/IM 007. "Die Schenkung der Mshatta Steine hat den Direktor der Museen in Konstantinopel Excellenz Hamdi Bey sehr verstimmt und leider hat derselben sein Misfallen der Ausgrabungen des Deutschen Palästina Vereins auf Tell el Mutesellim—Megiddo die ich leite empfindlich füh[r]en."

other objects of art as the fulcrum of the Orient or Rome debate.¹¹² But Mshatta also represented the antinomies of representation and ornament, of pure art and decorative art, and of the artistic threshold between Ummayyad and Abbasid (its dating is still somewhat contentious to this day).¹¹³ In order for these art-historical debates to take place in earnest, the valuable Mshatta stones needed to become more accessible in the museums on the Spree [Fig 4.42].

While the French, who controlled the railway between Damascus and Daraa, were willing to offer assistance for the Mshatta's transport out of the desert, the British were not amused. In November of the same year, Oxford Reverend Henry Baker Tristram (1822-1906) wrote a furious editorial for the *Daily Times* decrying the German actions in Transjordan as an international act of vandalism. Tristram, who claimed to have discovered Mshatta in 1872, stated:

This marvelous work, which has remained for 1,300 years, untouched by weather, unmutated by man, of which when I first saw not a chip was missing, has now, we are told, been given by the Sultan to the German Emperor, and that, under the auspices of German savants, the figures of the façade have been sawn off and conveyed to Haifa for transport to Berlin. Thus the solitary relic of a great historical era is mutilated, while in the Berlin Museum the detached fragments can be nothing more than curiosities. We may be reproached with the Elgin marbles. But that was long ago, and it is to be hoped that we have reached a higher stage in archaeology. Lord Elgin would at least plead that if he had not taken them they would have been destroyed. No such plea can be adduced from this act of vandalism.¹¹⁴

The ethical burden Tristram laid on the Sultan and even more so on the Kaiser was, nonetheless, irrelevant to the authorities in Berlin, especially Bode and Wiegand, who

¹¹² Oleg Grabar, "The Date and Meaning of Mshatta," in "Studies on Art and Archaeology in Honor of Ernest Kitzinger on His Seventy-Fifth Birthday," special issue, *Dumbarton Oaks Papers* 41 (1987): 243–47. See also Enderlein, *Mshatta—A Caliph's Palace*.

¹¹³ Grabar, "The Date and Meaning of Mshatta," 243.

¹¹⁴ H.B. Tristram, "An Act of Vandalism," *Daily Times*, London, November 9, 1910.

saw the acquisition as the cornerstone of their new Islamic museum. The Elgin marbles, in all of their scandalous history, were in their eyes a product of British tyranny. Mshatta, on the other hand, could at least appear as a mutual and smoothly synchronized exchange to everyone except, perhaps, Osman Hamdi and Tristram.

4.8 Gertrude Bell, Ernst Herzfeld, and the German-British Rivalry in Irak

Unlike other regions penetrated by the German-built railways, Mesopotamia was not terra incognita. Upper Mesopotamia, in particular, had been the archaeological domain of the British since George Smith's (1840-1876) discovery of Carchemish in 1876 and Patrick Henderson's excavation beginning in 1878. By the dawn of the twentieth century, with the railway activity in Anatolia well underway and the fledgling German colonial project taking off, the time had come for the Germans to elbow their way into the archaeological landscape of Mesopotamia and to come into more intimate contact with the lands that the Baghdad Railway would ultimately penetrate. Koldewey's permit to excavate Babylon, granted in 1898, was for all intents and purposes the most symbolic escalation of a British-German rivalry that would develop over the subsequent years, mirroring the larger geopolitical climate and the run-up to the Great War.¹¹⁵ Babylon had first been discovered by British antiquarian Claudius James Rich (1787–1821) in 1811 and was subject to increasingly detailed descriptions and studies by a

¹¹⁵ For an excellent scientific and biographical account of the dig at Babylon, see Walter Andrae, *Babylon: Die versunkene Weltstadt und ihr Ausgräber Robert Koldewey* (Berlin: Walter de Gruyter, 1952).

number of Britons, including Austen Henry Layard (1820–1858) in 1849,¹¹⁶ William Loftus (1820–1858) in 1857,¹¹⁷ and Henry Rawlinson (1810–1895)¹¹⁸ and Smith in 1875,¹¹⁹ as well as the native Assyrian Ottoman Hormuzd Rassam (1826–1910), who served the British Museum between 1879 and 1882.¹²⁰ Koldewey's scientific overtaking of the site and his intentions to bring some or even all of the site to Berlin in many ways represented to the British their increasing loss of influence in Irak, a province that had been their strongest sphere of influence in the Ottoman empire throughout the nineteenth century.¹²¹ Four new excavations initiated by the DOG in 1902 (Kisurra, Borsippa, Schuruppak, and Assur), another in 1907 (Hatra), and yet two more in 1912 (Uruk) and 1913 (Kar-Tukulti-Ninurta) reinforced the new power balance.

In 1906, L. S. Newmarch expressed his frank opinion about the German archaeological excavation's multipronged role as a colonial endeavor and its greater

¹¹⁶ Austen Henry Layard, *Nineveh and its Remains: With an Account of a Visit to the Chaldaean Christians of Kurdistan, and the Yezidis, or Devil-Worshippers, and an Enquiry into the Manners and Arts of the Ancient Assyrians* (London: J. Murray, 1849).

¹¹⁷ William Kenneth Loftus, *Travels and Researches in Chaldaea and Susiana: With an Account of the Excavations at Warka, the "Erech" of Nimrod and Shush, "Shushan the Palace" of Esther, in 1849–52* (London: J. Nisbet, 1857).

¹¹⁸ Henry Rawlinson, *Notes on the History of Babylonia* ([S.I.], c. 1854).

¹¹⁹ George Smith, *Assyrian Discoveries: An Account of Explorations and Discoveries on the Site of Nineveh during 1873 and 1874* (New York: Schribner, Armstrong, 1885).

¹²⁰ Hormuzd Rassam, *Asshur and the Land of Nimrod* (Cincinnati: Curtis & Jennings, 1897). The French also had a not insignificant presence in the area. Fulgence Fresnel (1795–1855) excavated Babylon between 1852 and 1854 with the German orientalist Jules Oppert (1825–1905). The bulk of their research was published in Jules Oppert, *Chronologie des Assyriens et des Babyloniens* (Paris, c. 1855).

¹²¹ The intricate dynamics of the British spheres of influence in the Persian Gulf in the late nineteenth and early twentieth centuries are explained in Caesar E. Farah, "Anglo-Ottoman Confrontation in the Persian Gulf in the late 19th and early 20th Centuries," in *Proceedings of the Seminar for Arabian Studies*, Vol. 33, *Papers from the Thirty-Sixth Meeting of the Seminar for Arabian Studies* (London: David Brown, 2003), 117–32.

geopolitical significance for Britain:

In my opinion, the excavations at Babylon and Kela Shergat ... are not merely excavations for archaeological research. It seems hardly necessary to have at Babylon three highly trained surveyors, who appear to have a good deal of engineering knowledge as well. Moreover, the excavations advance so slowly that one is inclined to think there must be some reason for the leisurely progress that is being made and to wonder what is being awaited. The employés [sic] at Babylon are changed rather frequently, apparently as soon as they have mastered enough Arabic and acquired enough patience to control and direct Arab labourers [sic]. Such men will be very useful hereafter when the Bagdad [sic] Railway enters this part of the country, not only in managing, but in collecting, numbers of Arab workmen... I think both these places are meant not only to serve the ends of archaeology but to act as centres [sic] for the collection of information and the dissemination of German influence.¹²²

The nature of the German-British archaeological rivalry, predicated on Newmarch's fear of the "dissemination of German influence," and its interrelationship with railway development in Irak can be charted in an intertextual and visual appraisal of the parallel and intermingling personal records of Gertrude Bell (1868–1926), the British orientalist and spy who had assisted William Ramsay's study of Binbirkilise in Karaman province,¹²³ T. E. Lawrence, and Ernst Herzfeld (1879–1948), the Lower Saxony-born archaeologist and Iranologist who assisted Walter Andrae (1875–1956) in his excavation at Assur and later was principal in charge of the excavations at Samarra that had been organized directly by the Kaiser Friedrich Museum. Bell's encounter with the German undertakings in Mesopotamia began in earnest in April 1909, when she traveled to Samarra for the first time, equipped with drawings authored by Herzfeld. Although Herzfeld's excavation at Samarra would not itself begin in earnest until 1911, the

¹²² L. S. Newmarch to Nicholas O'Connor, Baghdad, March 10, 1906, NA FO 406/30, 12.

¹²³ Although Gertrude Bell generally disapproved of the quality of German archaeological practice in Mesopotamia, it is noteworthy that the work of Carl Holzmann (1849–1914) was a touchstone of her earlier work with Ramsay. See Carl Holzmann, *Binbirkilise: Archäologische Skizzen aus Anatolien, ein Beitrag zur Kunstgeschichte des christlichen Kirchenbaues* (Hamburg: Boyean & Maasch, 1904); Sir William Mitchell Ramsay and Gertrude Bell, *The Thousand and One Churches* (New York: Hodder and Stoughton, 1909).

drawings indicate that he had, at some point while working at Assur, done preliminary studies of the site.¹²⁴ She described Herzfeld's drawings as "woefully bad" and took photographs of the site herself [Fig 4.43]. Bell spent the next three days documenting the site and further scrutinizing Herzfeld's preliminary work. In a letter to her mother, she noted with greater exasperation:

As I feared, all Herzfeld's work has had to be redone and I have been at it hard for three days and a half. However it's all finished now and I don't regret it because one learns more about buildings when one goes over them brick by brick with the measuring tape than in any other way. Also (but this is an unworthy consideration!) I shall have a merry time showing up Herzfeld. He deserves it however. I have had great good luck. Yesterday while I was planning a palace of one of the khalifs [sic], a man who was digging for bricks among the ruins, uncovered a most beautiful bit of plaster decoration, still in place. I had already found and drawn several fragments of stucco relief in the palace and when I saw this one I promised bakhshish [sic] to anyone who would bring me more. The result was that I got two other wall decorations, in fragments, but enough to be able to reconstruct the lovely running patterns on them. They are very important. I know no other examples of early stucco patterns of this kind, except in Egypt. Strzygowski will be wild with joy over them.¹²⁵

A week later Bell visited Assur—not long after Herzfeld had left his post at the site—and visited with Andrae, the architect Walter Bachmann (1883–1958), and other members of Andrae's team [Fig 4.44]. "We all lunched together very cheerfully," she noted, "and they agreed with me that Herzfeld was a charlatan."¹²⁶ She went on to note: "He worked here for two years and [could] learn nothing because he knew everything before."¹²⁷ Bell's distrust of Herzfeld in particular and her description of him as a charlatan indicate her immutable predisposition to mistrust the German archaeological project in Mesopotamia as one of both hacks and alternate motives.

¹²⁴ Gertrude Bell Diaries, April 15, 1909, NUSC.

¹²⁵ Gertrude Bell to her mother, April 18, 1909, NUSC Gertrude Bell Letters.

¹²⁶ Gertrude Bell Diaries, April 23, 1909, NUSC.

¹²⁷ Ibid.

Also of note are the diaries of the young T. E. Lawrence, who crossed paths with Bell in July 1911.¹²⁸ In August of the same year, Lawrence had a disenchanting encounter with German railway engineers in a restaurant in Aleppo. Lawrence described seeing a group of eight or ten Levantines merrily imbibing and dancing until their revelry was thwarted by an autocratic group of German Baghdad Railway engineers:

Tremendous uproar of Levantines (Little man a Greek Jew), 8 or 10 of them shrieking together and dancing about. I was the only person at the table who went on eating. Little man speechless with astonishment. Sudden irruption from near table of eleven mighty German railway engineers who told little man they had considered throwing him into the river which ran at the bottom of the garden, and would do it at once if he or his friends said another word.¹²⁹

After his completion of the Hejaz Railway, Heinrich August Meißner Pasha was transferred to the Irak section (Section 4) of the Baghdad Railway in 1910 and joined the ranks of German archaeologists in the area as a leading—and influential—symbol of Mesopotamia’s creeping shift to German control. He also became the man for the British to come to know and understand, and Gertrude Bell, now based in Baghdad, would be the main person to do so. Bell first met Meißner, with whom she established a friendly rapport, in May 1911, while he was in Birecik scouting the railway.¹³⁰ Later that month Bell traveled to Aleppo, where she stayed and mingled at the German mission run by a certain Martha Koch and met Felix Langenegger, an architect employed by Max von Oppenheim.¹³¹ She reported that Koch, the nerve center of German life in Aleppo as the

¹²⁸ Bell and Lawrence would also collaborate in intelligence operations for the British government during World War I.

¹²⁹ T. E. Lawrence diary of 1911, entry on August 7. Published as T. E. Lawrence, *The Diary Kept by T. E. Lawrence while Traveling in Arabia During 1911* (Reading, UK: Garnet, 1998), 34.

¹³⁰ Gertrude Bell Diaries, May 19 and 20, 1911, NUSC.

¹³¹ *Ibid.*, May 23, 1911.

caretaker of its German hospice and traveler's house, had strong opinions about the archaeological and railway men penetrating the area; she believed that von Oppenheim was creating a "negative effect" everywhere he went and found Meißner to be "as bad as an oriental."¹³² Koch did, however, approve of Meißner's wife, the daughter of Abdülhamid's Armenian court jeweler, and shared with Bell the sentiment of Ottomans and Germans alike who found it irritating that their son was guaranteed a life income by the Sultan.¹³³

Bell was also in Aleppo at the same time that Koch and Foellner were assisting Sarre and the Berlin museums with the dismantling and shipment of the "Aleppo-Zimmer," a delicately painted set of wooden interior walls dating from the early seventeenth century that the Christian-Syrian owners of a private residence in Aleppo, the "Haus Wakil," were removing for a renovation. The walls, with their rich polychromatic array of vegetal motifs and cornice of carved muqarnas, were seen as a distinct yet related corollary to the examples being unearthed in Damascus and represented another major frontier for the Berlin Museums' Islamic collections, a genre of art which had been largely ignored by collectors elsewhere on the continent.¹³⁴ Koch apparently made no

¹³² Ibid.

¹³³ Ibid. This type of person was known as a *simsar* a word for which there is no good translation. The role was essentially a landlord with a local hospitality network and knowledge of accommodations in a given area. For an historical contextualization, see Gëzim Alpion, *Encounters with Civilizations: From Alexander the Great to Mother Teresa* (Piscataway, NJ: Transaction, 2001), 76-78.

¹³⁴ Regarding the Aleppo-Zimmer, see Julia Gonella, *Ein christlich-orientalisches Wohnhaus des 17. Jahrhunderts aus Aleppo (Syrien): Das "Aleppo-Zimmer" im Museum für Islamische Kunst* (Berlin: Staatliche Museen zu Berlin—Preußischer Kulturbesitz, 1996); Julia Gonella and Jens Kröger, eds., *Angels Peonies, and Fabulous Creatures: The Aleppo Room in Berlin: International Symposium of the Museum für Islamische Kunst—Staatliche Museen zu Berlin 12.–14. April 2002* (Münster: Rhema, 2008).

allusion to the acquisition of the so-called Aleppozimmer (Aleppo Room) while Bell was in Aleppo, which was in all likelihood intentional. Yet again, railway officials played a fundamental role in the acquisition of the work of art. In this instance, Wilhelm von Bode personally assigned Foellner, the section engineer of the Baghdad Railway based in Aleppo, with the safe documentation, acquisition, removal, and shipping of the walls¹³⁵ [Figs. 4.45–4.46].

Upon returning to Baghdad in March 1914, Bell made plans to visit with Meißner and to see the developments of the railways with her own eyes. On her arrival in the city, she noted: “The first thing I saw as I came into Baghdad was the railway station—it’s the only thing that looks like it’s going forward instead of round and round, and I am glad to see it.”¹³⁶ On March 28, Bell spent the better part of the day with Meißner, touring the railway operations in Baghdad and their environs [Fig. 4.47]. She painted a vivid image of the scene:

The palms nodded over Tigris bank and on its swollen tide lay a flotilla of ancient boats, their lateen sails furled, their shallow hold filled with wooden sleepers straight from Hamburg. The steam cranes puffed and creaked, the sleepers swung unsteadily over the muddy bank to be carried away by ceaseless streams of ragged Arabs, blue clad and ragged, who ran like ants backwards and forwards, singing as they went. Down a wide alley through the palm grove ran the rails and upon them stood locomotives of the latest pattern, some completed, waiting for the fires [?] to move off to [the] railhead, others in varying stages of reconstruction. The muddy waters of Tigris flood, the palms, the ragged singing Arabs—these were the ancient East, and in their midst stood the shining faultless engines, the blue eyed, close cropped Germans, with quick decisive mood [?] and smart military bearing—the soldiery of the West, come out to conquer and conquering, their weapon science. Can you see it at all? I should like you to see it through my eyes. Hospitals, we visited, storehouses, the station building, and everywhere reigned the same precision, the same forethought—the ordered Western organization. But the difficulties! They have to import everything. They cannot use the water without straining it because it is salt, for lack of stone they must cast blocks of concrete, for lack of sand (there is not even sand in Arabia, it seems!) they must crush pebbles. ‘We have neither wood nor

¹³⁵ Wilhelm von Bode to H. Foellner, Berlin, August 5, 1912, I I/IM 10, 342.

¹³⁶ Gertrude Bell Diaries, March 26, 1914, NUSC.

water,’ said Meißner Pasha, ‘stone nor sand nor wood.’¹³⁷

Bell’s characterization of science as the “German weapon” came full circle in 1917 as she described the day Baghdad was recovered by British forces. She characterized the failed German project in Irak as the end of a colonial project predicated on a brand of railway imperialism and squashed by British protectionism, a specter that would have “flattened” a great Arab center:

Their place is not going to be in this sun; it would have been if they had let well alone and not tried to force the pace by war. We had, in my opinion, for all practical purposes resigned this country to them; they knew it well enough—Meißner told me so 3 years ago in veiled terms at Baghdad. Now they’re out of it forever I hope, and they have no one but themselves to thank. I don’t doubt it’s to the advantage of the country that they should be out. We shall, I trust, make it a great centre [sic] of Arab civilization and prosperity; they were bent on a Turco-Prussian steam roller which would have flattened out, if it could, all national qualities and characteristics. And now we’ve got to keep the other ideal well before us; that will be my job partly, I hope, and I never lose sight of it.¹³⁸

Herzfeld, Bell’s perceived antagonist in Mesopotamia, seemed to be far less concerned with the British operations in the area than she was with the German operations. Herzfeld graciously invited Bell to his dig at Samarra in 1911 and collegially referred to her work throughout his excavation journals.¹³⁹ Given his proximity to Meißner’s rail construction operations, there was surprisingly little engagement between the two, and it would appear that Herzfeld was ultimately not particularly interested in the railway operations and the project’s ability to either facilitate his work or to function in tandem with it. Rather, he seemed to have left any necessary choreography between the two entities up to the authorities at the DOG and the state museums.

¹³⁷ Ibid., March 28, 1914.

¹³⁸ Gertrude Bell to her father, March 10, 1917, Gertrude Bell Letters, NUSC.

¹³⁹ See, for example, SIFSG, Ernst Herzfeld papers, FSA A.6 Series 7; FSA A6 07.07, 58–62.

Unlike von Oppenheim's operations at Tell Halaf, where the expedition house operated as a sort of multipurpose outlet for German expatriates, Herzfeld preferred to keep his workforce and his operations untethered, establishing base camps with collapsible housing and tents for only short periods of time [Fig. 4.48]. His excavations at Samarra, which, as Thomas Leisten has shown, were by 1913 well-known across both the German and the Ottoman empires as digs of extreme scientific value, preceded, as had those at Sam'al, Tell Halaf and Gordium, the completion of the rail in their vicinity, as the southerly connection from Baghdad reached Samarra in October of 1914, shortly after the beginning of the war, where it remain the terminus until 1940.¹⁴⁰

4.9 Conclusion

The archaeological discoveries and documentation by the Körtes, Berggren, von Luschan, Schumacher, and Herzfeld, aided and abetted by and interpreted through the antiquity laws, played a twofold role in the German construction of the Ottoman rail network. First, they assisted and actualized the railway in their ability to define territory, both literally and figuratively, as a cultural domain. Second, they materialized an artistic and cultural linkage that served as many needs on the ground as it did for imperial identity in Berlin. The laying of the monument of Western (and later German) technology *sin qua non*—the rail—in tandem with the breaking down of antique monuments through

¹⁴⁰ See Thomas Leisten, *Excavation of Samarra* (Mainz: P. von Zabern, 2003), 1-32. Leisten also describes some of the concomitance between that dig and railway construction through the end of World War I.

archaeology effectively created a professional profile that can perfectly fulfill imperial impulses and the national self-fashioning that accompany them.

The politician and journalist Friedrich Dernburg made the predatory aspect of the railway and all of its attendant economies clear. For Dernburg, it is the sound of the steam train that has awakened the Land of “Sleeping Beauty”¹⁴¹ from its long slumber and like a fertilizing river the railway tracks have brought abundant blessings into those hitherto remote areas. The slumbering, feminized Ottoman empire was brought to life through the penetration of the German rail.¹⁴² The analogy is unequivocal. But it is also revealing of the nature of the perceived relationship between the empires. It is a biologically analogized power relationship thought of as mimetic to a greater model of a shifting balance of world power. The construction of massive geopolitical vectors that the rail came to represent lay at the core of the modern German construction of the ancient world.

¹⁴¹ “Wie im Zaubermärchen, wo die schlafenden Prinzessinnen eine nach der anderen aufwachen, so haben sich Spanien, Italien, Griechenland, die Balkangruppen erhoben.” Friedrich Dernburg, *Auf deutscher Bahn in Kleinasien: Eine Herbstfahrt* (Berlin, 1892), 188. Dernburg was of Jewish descent and there is a discernible Zionist subtext to his travel writings.

¹⁴² Fuhrmann also noted this connection. See “Visions of Germany in Turkey,” 10.

CHAPTER 5: ARCHITECTURE AND URBANISM

“The tracks of Alexander the Great and Mithradites have been obliterated by us, but the tracks of those who build this railway for us will remain.”

—Cemal Pasha, Governor of Adana province¹

5.1 Architecture, Urbanism and Ambiguous Transmutation

5.1.1 What is Ambiguous Transmutation?

The German laying of the Ottoman rail network, comprising four major subdivisions represented the Ottoman empire's most intrinsic and materially significant modernization effort in the final half century of its existence. While Tanzimat reforms recast society, the railway went one step further in radically recasting the built environment and the spatiotemporal relationships of the people and places affected. But the railway network also represents the empire's most synthetic and extrinsic efforts to transmute Western technology and to actualize modernity in a way that remained autonomous, insofar as that was geostrategically advisable. The kinship that the Ottoman empire was able to foster with Germany and German expertise was far less lopsided and certainly more dynamic than any other relationship it had with a European power as part of the Concert of Europe. Although at times imprecise and vague in its mutual ambitions, the German-Ottoman partnership laid the groundwork for a spectacular renovation from Banja Luka to Baghdad and from Medgidia (Mecidiye) to Medina, evolving, as it did, from a convivial relationship to a filial one. Having described the political vicissitudes and the topography, geography, and archaeology associated with the German-Ottoman

¹ As cited by McMurray, *Distant Ties*, 13.

railway association, we may now establish a working concept for the synthetic (as opposed to found) and plastic (as opposed to fixed) creation of form and space from the ground upwards, a concept described here as *ambiguous transmutation*.

What does this mean? The nominal part of this concept—transmutation—is directly related to Marshall Hodgson’s exegesis on the “Generation of 1789,” which defines the ways in which specific economic, social, and intellectual transformations in the Occident fractured the Afro-Eurasian ecumenical world and subsequently facilitated a European hegemony in the nineteenth century (as well as a “paramountcy” in the twentieth).² Hodgson supersedes heroic and local accounts of Early Modern and Enlightenment era transformation by placing the uniquely European metamorphosis into a global historical framework and focusing on process rather than product and mechanics rather than progress. As an actor, not a victor, the nineteenth-century Occidental shifted his allegiances from “custom and continuity” to “calculation and innovation,” according to Hodgson, in ways that were more unwitting than they were intentional.³ Islamic culture, having supposedly manifested its “greatest” florescence prior to Europe’s, had already established institutions of “independent calculation” and “personal initiative” and acclimated its followers to certain tactical and canny ways of being that were not at odds

² Hodgson, *Venture of Islam*, 177. Hodgson distinguishes between “hegemony” and “paramountcy,” describing the former as placing less insistence on the *leading* role of the West in the modern period and emphasizing that the West did not unilaterally dominate the entire world but rather dominated “interstate relations,” including political, commercial, and intellectual ones. He notes, in particular, the de facto power that was bestowed upon European consular representatives in virtually all non-European lands, even before there may have been formalized political domination.

³ Hodgson, *Venture of Islam*, 182.

with religion as they were in the Enlightenment.⁴ The transmutation, as such, was less a transformation of life than of what Hodgson terms “technicalism,”⁵ broadly defined as the primacy of specialized technical considerations over all others. It was this transformation, not religion or culture per se, that facilitated ascendancy and hegemony; and its effects were unique and discrete:

In that special form [of technicalism]... the shift went to unprecedented lengths, so that the results set new conditions for all historical life. It was not that the human mind as such was suddenly emancipated, as if by some mutation, and could therefore begin freely to explore all calculable possibilities where, before, new paths could be opened only by chance and despite the weight of customary bias. Rather, concrete new sorts of opportunity for social investment, hitherto impractical even for the most emancipated mind, became practicable, attracting even minds that still, by and large, resisted any deviation from intellectual habit. And then the resistance was gradually reduced.⁶

The transmutation was, by its very nature, global and dependent on the world at large for its actualization. Just as it had not been disassociative in its European origins (having relied heavily on Islamicate knowledge and technology), neither would it be disassociative in its proliferation. Technicalism trumped the boundaries and challenges posed by artificial limits like state borders, language barriers, and “hard to exploit markets”⁷ because that was by definition its *modus operandi*. To be sure, within the Islamic world the transmutation and its technicalist grasp introduced specific conflicts and anxieties. While the Islamic florescence had furnished a place for institutions of individual *calculation*, it had not equally emphasized *specialization* and thus fomented a system where innovation tended to occur nonautonomously with longer periods of

⁴ Ibid.

⁵ Ibid.

⁶ Ibid., 182–83.

⁷ Ibid., 201.

gestation and iteration.⁸ The transmutation in Islamic culture also stood in internal conflict with agrarian societal organization, causing a significant amount of moral and psychological duress, particularly early on. Yet the transmutation became normalized by the latter half of the nineteenth century, partly because technicalism began to acquire internal credence in Islamic culture and partly because so much of the Islamic world came to be ruled by Occidental states.

The “ambiguity” of the transmutation arises from the nature of the German-Ottoman association. The German construction of the railways epitomized the great transmutation through its physical transformation of the Ottoman environment, and German expertise epitomized the new imperatives of technicalism. The engagement, however, was patently contractual and defies virtually all other models of the day where the transmutation was either colonial (“nuclear”) or otherwise diffuse (“irruptive”).⁹ Not simply contractual and solicited, the transmutation through rail also operated beneath—rather than above—the vicissitudes and peculiarities of the political, economic, and professional stakeholders. To illustrate how varied the effects of this ambiguous relationship could be, one need only look at the spectrum of roles played by a single actor such as the engineer Heinrich August Meißner, who functioned as a colonist in Mesopotamia and a source of technical expertise in the Hejaz. How easily colonialism and expertise could pivot in the German-Ottoman partnership is precisely what makes it so important to study.

⁸ Ibid., 202–4.

⁹ Ibid., 201–2.

In this context, “ambiguity” is not meant to connote vagueness so much as to evoke a morphological duality where two sides locked in a defined partnership continually changed the nature of their relationship. Rather than being a monadic concept aligned with an array of familiar, staid and nonemancipatory precepts indebted to poststructuralist thinking, ambiguous transmutation is a fundamentally productive concept, with transformation and technicalism taken as a given while the actors’ relationships with one another are not. Hodgson’s contention that transmutation manifests form is underscored in this chapter, which considers form through the architecture and urbanism connected with the Ottoman railways.¹⁰ And while transmutation creates numerous forms—transmogrified, translated, bastard, syncretic—ambiguous transmutation creates forms that bare the process of their dialectical, geopolitical constitution.

Ambiguously transmuted forms would appear to resist broad aesthetic categorization and may, in fact, be banal and at times wholly unrecognizable as aesthetic entities in the first place. There are some good explanations for this. First, as the product of a strategic geopolitical partnership, the imperatives of aesthetic sensitivity and the creation of meaning through form reliably followed exceptionally contingent political conditions on a secondary or tertiary level. Second, the evidence suggests that even when form constituted a geopolitical priority, it was conceived in the spirit of improvisation under stopgap conditions without a well-developed ideology or critical or aesthetic repertoire.

¹⁰ Ibid., 182–83.

What, then, makes these forms even worth considering? One need not emphasize that unspectacular and derivative monuments, buildings, and urban form are instructive. Vernacular studies provide incomparable insights into human patterns, aspirations, and climatic strategies; and the study of grotesque form reveals a great deal about beauty itself. But the forms materialized through the railway network—bridges and tunnels, train stations, monuments, auxiliary structures, and city quarters—fall into neither of these categories. They are neither vernacular nor grotesque, and while they are at times banal, their banality demonstrates the very consequences of ambiguous transmutation. These consequences and a deeper understanding of the conditions under which they are created are paradigmatic. This is a paradigm that takes its place outside of the dialectical and well-worn West-East, colonizer-colonized, master-slave couplings and instead attempts to reckon the importance of the dyad—and the dialectical—to the realities of unconventional geopolitical relationships such as the nineteenth-century German-Ottoman partnership. While the present work is only one example, the paradigm is transposable to other examples with affinitive circumstances, most probably the parts of the world, to appropriate the Marxist concept of semi-colonialism, penetrated by imperial capital, trade and influence where juridical independence was nevertheless maintained¹¹:

¹¹ This is an adapted definition of the term semi-colonialism as it is outlined by Gordon Marshall, “semi-colonialism,” *A Dictionary of Sociology* (1998); *Encyclopedia.com*, <http://www.encyclopedia.com>, accessed January 19, 2014. The term gained a great deal of currency through the Communist International in 1919 which developed Marxist ideas into a distinct theoretical model which stipulated that the semi-colonial condition handicapped the working majority of the population of a country because robust and even economic development was not possible. Only businesses and industries developed through foreign investment and that benefitted from exporting stood to gain from the arrangement. This has a distinct resonance with the German-Ottoman relationship and the economic aspects of the railways as part of its purview.

Persia, China, Thailand, Afghanistan, Yemen, and Ethiopia, being some of the more prominent examples.

5.1.2 Ambiguous Transmutation in Context

It is unsurprising that the physical alterations the railways imposed on the Ottoman empire's built environment also pose unique challenges for established German and Ottoman architectural and urban histories [Fig. 5.1]. Ambiguous transmutation offers a critical addition to each of these histories.

Histories of the late Ottoman empire tend to emphasize one or both of two themes. The first and more common theme is cosmopolitanism, which stresses the empire's pluralist society as the source, even the inspiration, for a move towards a more diverse architectural profession and set of aesthetic idioms. The vogue of cosmopolitanism across cultural studies stems from the concept's promotion by Kwame Anthony Appiah in his 2006 manifesto, *Cosmopolitanism: Ethics in a World of Strangers*.¹² In its essence, it is an ethical position advocating a kinship of humanity and a refutation of patriotism and nationalism that is intended to supplant and / or counter the terms "globalization" and "multiculturalism." Appiah's concept, however, has had a far more convincing currency in the humanistic fields *aside from* history —philosophy, law, politics—which emphasize the present and lived condition, a tacit enlightenment born from the unconscious shades of gray of common everyday experiences in the twenty-first

¹² Kwame Anthony Appiah, *Cosmopolitanism: Ethics in a World of Strangers* (New York: W. W. Norton, 2006).

century. The description of historical communities—such as the multiethnic Ottomans—as cosmopolitan often carries an air of speculation, of projective wishes or utopian renarration. It would seem, however, more apt to talk of processes or events, rather than people, as cosmopolitan.

Nevertheless, both “globalization” and “multiculturalism” have delimited meanings that are useful, particularly for history, as they represent social rather than ethical notions. Where they may become problematic is when they are used positivistically. Multiculturalism, which considers the co- and interexistence of various subnational and subethnic groups in a single political unit, and globalization, which concerns the (largely economic) process of conflating a discernible and conceivable world city on which cosmopolitanism is predicated, are necessary backdrops for this study. Appiah’s suggestion that national borders can be viewed as arbitrary vestiges of history is perhaps correct, but this does not mean that they are unimportant or that their effects must somehow shape ethics. This addendum to Appiah’s concept underlies the historical understanding of ambiguous transmutation as an operation of culture—which includes architecture.

Non-Muslim Ottoman architects—especially Armenians—took charge in many major imperial projects in İstanbul, stressing an appreciation for and emphasis on contemporary European idioms. Historians who write about these changes also tend to opine that the infiltration of European references and style represents not a generalized decline and erosion of Ottoman “classicism” but rather the manifestation of its own evolving, globalizing imperial identity. The increased presence of non-Ottoman architects

and planners—most frequently French, Italian, and German—is typically taken to further indicate the burgeoning cosmopolitan, global aesthetic culture.

The second theme histories of the late Ottoman empire commonly emphasize is modernity. These narratives stress the physical transformations enacted by Tanzimat reforms and the active roles of technology and industry, irrespective of who designed or realized them, or under what circumstances, often with revisionary undertones that assert that “modernity” was not the heroic project of Mustafa Kemal and secularism alone, but a project with Ottoman origins.

Both the cosmopolitan and the modernistic emphasis fail to provide a complete portrait. As has already been documented here, neither the internal nor international aspects of the construction of the empire’s rail network point to a system of unequivocal mutualism between individuals, as the concept of cosmopolitanism would imply. While cosmopolitanism may serve as a leitmotif or utopian ambition, it seems rarely to function as such on a subpolitical level. This was as true in the Ottoman empire as it was virtually everywhere else in the late nineteenth century, where relations were far more complex, problem-ridden, and contingent on deeply imbalanced and fluctuating social, economic, national and international systems. Narratives that stress autonomous production or contracts coming out of modernity fail to recognize the inherent contradictions, trauma, and duress posed by the very idea of modernity, such as the sight of a coughing locomotive moving at breakneck speed, and its eastward transmutation of the landscape. To seek deeper origins for Ottoman “modernity,” and even to contend that Ottoman modernization represented a highly deliberate and conceptual orchestration to naturalize Western technology and somehow make it *a priori* Ottoman, is to ignore the cultural

transformations of technicalism that occur through pressure, brute force, unconscious thinking, or genuine awe.¹³

On the German side, the historiographic territory implied by transmutation remains even less charted. Because the German empire did not coalesce until 1871, and histories of the decades preceding and following this study tend to emphasize the dominant theme of style, its meaning for national and imperial identity, the debates it evoked, and the architects and planners who engaged it.¹⁴ This hermeneutic emphasis, particularly given Germany's low international profile at the time, is understandable. But it has also created a vacuum for understanding Germany's important, if relatively small, forays abroad. To some extent, scholars have more recently closed this gap with a livelier, more critical consideration of German architecture and city planning in its

¹³ Some leading literature in this vein includes Ali Akyıldız, *Osmanlı Bürokrasisi ve Modernleşme* (İstanbul: İletişim Yayınları, 2004); Stephanie Cronin, "Tribes, Coups and Princes: Building a Modern Army in Saudi Arabia," *Middle Eastern Studies* 49, no. 1 (January 2013): 2-28; Paul Dumont, Gregoire François Georgeon, eds., *Modernleşme Sürecinde Osmanlı Kentleri* (İstanbul: Tarih Vakfı Yurt Yayınları, 1999); Bilal Eryılmaz, *Tanzimat ve Yönetimde Modernleşme* (İstanbul: İşaret Yayınları, 1992); Ulrike Freitag, Malte Fuhrmann, Nora Lafi, Florian Riedler, eds., *The City in the Ottoman Empire: Migration and the Making of Urban Modernity* (London: Routledge, 2011); Nora Lafi, *Municipalités Méditerranéennes: les Réformes Urbaines Ottomanes au Miroir d'une Histoire Comparée* (Berlin: K. Schwarz, 2005); Nora Lafi, *Une ville du Maghreb entre Ancien Régime et Réformes Ottomanes: Genèse des Institutions Municipales à Tripoli de Barbarie, 1795-1911* (Paris: L'Harmattan; Tunis: IRMC, 2002); Alan Mikhail and Christine M. Philliou, "The Ottoman Empire and the Imperial Turn," *Comparative Studies in Society and History* 54, no. 4 (October 2012): 721-45; J. P. Parry, "Steam Power and British Influence in Baghdad, 1820-1860," *The Historical Journal* 56, no. 1 (March 2013): 145-73; Selçuk Akşin Somel, *Osmanlıda Eğitim Modernleşmesi (1839-1908): İslamlaşma, Otokrasi ve Disiplin* (İstanbul: İletişim Yayınları, 2010); Chen Tzoref-Ashkenazi, "Romantic Attitudes toward Oriental Despotism," *The Journal of Modern History* 85, no. 2 (June 2013): 280-320.

¹⁴ See, for example, Francesco Dal Co, *Figures of Architecture and Thought, 1880-1920* (New York: Rizzoli, 1990); Valentin W. Hammerschmidt, *Anspruch und Ausdruck der Architektur des späten Historismus in Deutschland, 1860-1914* (Frankfurt am Main: Peter Lang, 1985); Harry F. Mallgrave and Eleftherios Ikononou, eds., *Empathy, Form and Space: Problems in German Aesthetics, 1873-1893* (Santa Monica, CA: Getty Center for the History of Art, 1993).

African and Pacific colonies.¹⁵ Nonetheless, a considerable gap remains in understanding Germany's increasingly expansive international undertakings beyond colonialism and their bearings on formal and spatial practices. In particular, German orientalism, an extension of the preeminent German academic philological tradition and a minor yet extremely important part of its collective domestic debate on style, has not been examined as an influencer of the German empire's actual engagement with the Orient in the last decades of the nineteenth century, despite mounting evidence of its importance to numerous internal and external applications and aftereffects.¹⁶

Building on the concept of ambiguous transmutation, this chapter presents a formal and critical analysis of key bridges, tunnels, stations, monuments, auxiliary buildings, and urban quarters built through the German-Ottoman partnership in tandem with the construction of the Ottoman rail network. It also considers the multiethnic labor forces and labor environments that realized this work, arguing that these structures and settings reveal and codify a unique geopolitical relationship, critically augment existing histories, and hint at a more general method of analysis transposable to wider realms.

¹⁵ See Michael Hofmann, *Deutsche Kolonialarchitektur und Siedlungen in Afrika* (Petersberg, Germany: Michael Imhof Verlag, 2013); Wolfgang Lauber, *Deutsche Architektur in Kamerun, 1884–1914: Deutsche Architekten und Kameruner Wissenschaftler dokumentieren die Bauten der deutschen Epoche in Kamerun* (Stuttgart: Karl Krämer, 1988); Wolfgang Lauber, *Deutsche Architektur in Togo, 1884–1914: Ein Vorbild für Ökologisches Bauen in den Tropen* (Stuttgart: Karl Krämer, 1993); Itohan Osayimwese, "Colonialism at the Center: German Colonial Architecture and the Design Reform Movement, 1829–1914" (PhD diss., University of Michigan, Ann Arbor, 2007); Itohan Osayimwese, "Demystifying Colonial Settlement: Building Handbooks for Settlers, 1904–1930," in *German Colonialism, Visual Culture, and Modern Memory*, ed. Volker M. Langbehn (New York: Routledge, 2012), 124–47.

¹⁶ While there is a good body of literature on German orientalism in general, very little specifically studies architecture. The main point of entry to date is Koppelkamm, *Exotische Architekturen*.

5.2 Ethnicity, Religion, Race, and Railway Building

5.2.1 Ethnicity, Religion, and Race as Organizational System

Notwithstanding the primary German-Ottoman substrate of the railways' organizational framework, many other sub- and extraimperial parties played elemental roles in its realization. Ottoman, German, and other archival records indicate some of the most common designations of the railways' builders, engineers, financiers, and administrators: Albanian, American, Anatolian, Arab, Armenian, Australian, Austrian, Bavarian Bedouin, British, Catholic, Circassian, Cretan, Cypriot, Druze, Egyptian, French, German, Germanic, Greek, Hungarian, Italian, Jewish, Kurdish, Lebanese, Macedonian, Maltese, Muslim, New Zealander, non-Christian, non-Muslim, non-Ottoman, Ottoman, Protestant, Prussian, Romanian, Russian, Sudanese, Swabian, Swiss, Syriac, and Turkish, being those found in the research for this study. It might be tempting to extrapolate a de facto cosmopolitanism from such a diverse aggregation. However, this would likely be a romantic mischaracterization, failing to recognize the trenchant hierarchies, power imbalances, and intercultural strife deriving from differences in hourly pay, a tacit distinction between "craft" and "labor," "expert" and "non-expert" and the important fact that by 1915 many of the railway workers were there involuntarily as prisoners of war. Cosmopolitan reasoning would also ignore the unrelenting and oppressive custom of codifying every individual who worked on the railway by his (and occasionally her) ethnicity, religion, or both, often indicating thereby the individual's place within a rigid division of labor.

The British traveler and diplomat Mark Sykes (1879–1919) appraised the ethnic dynamics of railway construction thusly while visiting the Hejaz Railway:

Alas! When the East takes to the mechanical arts it grows far fouler than the West... And I cannot weep or wonder at the fact that the Bedawin [sic] pulls up the rails and wreck the trains by instinct.¹⁷

The racist tenor and depiction of the conflict lines that commonly arose from cultural differences are very typical. But Sykes's appraisal is instructive as a portrayal of the railways' ethnocentric and religious complexity. As a Briton, he would have received permission from the Turkish-Ottoman railway authorities in Damascus to visit the Hejaz Railway only because of his diplomatic status; and as he was a non-Muslim, they most certainly would have prohibited him from traveling the railway south of Ma'an. To the north of Ma'an, Sykes would have encountered anti-Bedouin sentiment, as German and Ottoman parties alike perceived Bedouins as the railway's enemy, the group most likely to destroy it because it posed a threat to their own interests. Sykes would have observed that, this being the holy railway, only Muslims were (in principle) allowed to build it, and that even among the Muslim workers there were distinct hierarchies: Syrian Arabs tended to perform skilled labor, while Egyptian and Sudanese workers were contracted for nonskilled work [Fig. 5.2]. A predominantly non-Catholic German coterie of engineers would oversee these men and direct their work, perhaps—depending on the state of Ottoman-Italian relations in a given month—assisted by an Italian engineer or two. The wages for all of these men came from donations collected from Muslim patrons from Singapore, Morocco, Zanzibar, and India in Istanbul and sent to Damascus, in addition to direct investments by the Christian, Jewish, and Druze communities that stood to benefit

¹⁷ Nicholson, *Hejaz Railway*, 79.

from the railway's construction in the north irrespective of the railway's status as one built for Muslim pilgrims.

The complex ethnic and religious nature of the railways' gestation, an intercultural and hierarchical weave, indicates as much about its cosmopolitan qualities as it does its conservative, even regressive, ones. It seems reasonable to speculate that the ethnic and racial dynamics that existed within the German-Ottoman framework contributed roughly as much as political vicissitudes, and perhaps sometimes more, to the variable underlying the ambiguity in the process of ambiguous transmutation. Understanding this variable and its inflection of the process of transmutation will produce a fuller understanding of the elemental role played by race and religion in the physical construction of the railway environment, revealing the railway network's generative character as something beyond the matters of expertise and technicalism alone.

5.2.2 The Ottoman Railways in Europe: Parsing Balkanization

The piecemeal nature of the railway network's construction in Ottoman Europe paralleled the piecemeal nature of its labor force. Although Bavarian by birth, Maurice de Hirsch had cultivated an international identity that was reflected not only in his staunchly multinational business operations, but also in his own array of international residences. The composition of the workforce, however, more directly reflected the preferences of von Pressel, who had been commissioned by Hirsch, the Ministry of the Interior, and the

Ministry of Public Works to survey northern Bosnia in 1869 and Rumelia shortly thereafter.¹⁸

In 1876, after conducting additional studies in Anatolia and Mesopotamia, Pressel authored a key manuscript entitled *Situation der Türkei: Charakteristiken und Aphorismen* (The Situation of Turkey: Characteristics and Aphorisms).¹⁹ With a handful of lines in the Ottoman Empire successfully completed, yet facing a stalemate with the Porte regarding further railway development in Anatolia, Pressel's unfiltered reflections manifest his bittersweet relationship with both the Ottoman government and its people. Of note are Pressel's numerous observations about the myriad ethnic populations of the Balkans and the roles they played in the construction of the railway lines there. Beyond indicating that virtually all of the populations employed for the unskilled and semiskilled labor of these lines were local, Pressel's text reveals the complex cultural dynamics between ethnic subgroups within the empire and, more presciently, the way those dynamics were maneuvered and exploited through the process of the German-led railway development.

Before laying out Pressel's ethnocultural appraisals, it is worth noting that Pressel's platitudes on ethnicity, rather typical for the day, were often tempered with descriptions of exceptions or contradictions, typically rendered through interactions with individuals. One of the most intriguing of these episodes is an encounter with a minor

¹⁸ Grunwald (*Türkenhirsch*, 182) reports that Pressel's engagement began around 1870, while Pohl states that he came to the position in 1872. See Manfred Pohl, *Philipp Holzmann: Geschichte eines Bauunternehmens, 1849–1999* (Munich: C.H. Beck, 1999), 72. Pressel's own records indicate that the year was 1869.

¹⁹ Wilhelm von Pressel, "Situation der Türkei: Charakteristiken [sic] und Aphorismen" (manuscript), DM NL 13II/026. See also Wilhelm von Pressel, *Les Chemins de fer en Turquie d'Asie: Projet d'un réseau complet* (Zurich: Orell Füssli, 1902).

Armenian landlord (*rajah*) living in the Balkans who astounds Pressel with his learnedness, candor, and realistic geopolitical view of the railway endeavors in Southeastern Europe. The landlord says,

They [build the railways] because [the Turks] must have us [non-Turks]. They do it to place before Europe the semblance that [Ottomans] are of a more tolerant and liberal attitude. In this vain, we are simple demonstration objects, nothing more. [Such] decisions on all matters of the empire do not originate from the ministries, the assemblies or government institutions so as to perform the farce of the adoption of European forms of government, but rather entirely at the Palace or within the intimate circles of the Grand Vizier, from which we [landlords], myself included, are left out and placed under the pervasive contempt for all non-Turks ... high or low, [we are] forced to play the role of tolerance, combined with that of worker and the mediator (he used the strong expression *pezevenk* [pimp]) between state and stranger. They have reduced us to this position, we need acquiesce to it, as we are dependent on this land [for] our [livelihood], but the Turks have to pay us for it. Although we are suppressed we understand [the railway's] advantages which, in our view, outweigh the sweetness that comes with enjoying power.²⁰

Pressel takes these remarks to indicate defeatism, abandoned nationalism, and a reluctant agreement by the non-Turkish Ottoman populace to play the main role of facilitators for the German remodeling of the Balkans.²¹ Yet seen through the lenses of a longer *durée* of subnational history and the implicit Porte policy, the comment amounts to more than a mere grievance. Contrary to Pressel's appraisal that the railway marked a death knell for

²⁰ Pressel, "Situation der Türkei," 18–19. "Sie tun es, weil sie uns haben müssen. Sie tun es, um sich vor Europa den Anschein toleranter und freisinniger Gesinnung zu geben. Im Grund betrachtet, sind wir einfache Demonstrationsobjekte, weiter nichts. Die Entscheidungen über alle Angelegenheiten des Reichs erfolgen nicht im Ministerrat oder Staatsrat, Institutionen, eingeführt wie alle anderen, um die Farce der Adoption europäischer Regierungsformen durchzuführen, sondern im Palais oder in den intimen Kreisen des Großveziers, von welcher wir Rajah's, auch ich, ausgeschlossen sind, und in welchem dem Gefühle der Verachtung aller Nichttürken... So sind wir Rajah's hoch oder niedrig gestellt, gezwungen, die Rolle des Geduldeten zu spielen, verbunden mit derjenigen des Arbeiters und des Vermittlers (er gebrauchte den starken Ausdruck des *pezevenk*) zwischen den wirklichen Staatslenkern und den Fremden. Sie haben uns zu dieser Stellung erniedrigt, wir müssen uns in dieselbe fügen, denn wir sind auf dieses Land unserer Heimat angewiesen, aber die Türken haben es uns zu bezahlen. Obgleich Unterdrückte verstehen wir es, uns Vorteile zu verschaffen, welche in unseren Augen schwerer wiegen als die Süßigkeit des Genusses der Macht."

²¹ Ibid., 19.

Balkan nationalism, the grievance instead indicates a very legitimate reason for Balkan nationalism to emerge from dormancy (as it would). Procedurally, it reveals the curious choice of the Porte to outsource its middle management of the project to non-Turks and non-Muslims. This may have been considered advantageous insofar as Christians in general might orchestrate smoother interactions with the German-led railway companies, but given the project's enormous stakes, the decision to forego more direct involvement with day-to-day issues like land acquisition, staffing, and logistics appears deliberate. To what end? Most probably, it demonstrates what the landlord defined as the desire to present the (farcical) appearance of greater tolerance and liberalism in so direct a collaboration with Europe in general and Germany in particular—an appearance that the Porte either was uncertain or doubted could be effected with more direct Turkish involvement. Regardless, this was a policy that would be abandoned in the following decades.

Concerning skilled and semiskilled laborers, Pressel's accounts manifest boilerplate ethnic profiles of the kaleidoscopic Balkans and indicate the relative "utility" of various labor groups [**Fig. 5.3**]. Turks, essentially colonists, are the most privileged and not prone to working.²² Greeks, available primarily around the coasts, make good workers but occasionally believe that menial labor is beneath them.²³ Tatars, found in small villages, are a casual, felicitous people who demonstrate warmth, tolerance, and a good work ethic.²⁴ The Circassians in Bulgaria also make good workers, but not quite as

²² Ibid., 23.

²³ Ibid.

²⁴ Ibid.

good as those in Anatolia, who have not been influenced by Bulgarian brutishness and retain more of their natural character.²⁵ Armenians, ample in and around Edirne, have no particularly strong advantages or disadvantages.²⁶ Aromanians (Macedo-Romanians) live peacefully with their neighbors and have proven their savvy in the field of transportation.²⁷ Sephardim and Roma (gypsies) express no interest in working on the railways.²⁸ Finally, Albanians excel primarily in agriculture and are less likely to be useful for construction.²⁹

5.2.3 The Anatolian Railways: Multinationals and the Ottoman Core

Although orchestrated by the German-led Anatolian Railway Company, the railway construction from İzmit onward to Ankara and Eskişehir drew in large part upon the labor model established by the Haydarpaşa-İzmit railway, in which the Porte subcontracted British engineers to oversee a primarily Ottoman labor force. The main difference was the sheer scale of the endeavor, as it encompassed a greater distance, greater engineering challenges, and the necessity of a larger unskilled labor workforce. Deutsche Bank's bureaucrats, charged with the subcontracting of the construction of the Anatolian Railways (as well as the Baghdad Railway after that), were inclined to staff

²⁵ Ibid.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid., 24.

²⁹ Ibid., 23.

skilled positions other than stonemasons (typically Italians) with its own engineers, most of whom had worked on projects for the firm within the German empire. The men typically came from the firm's *Oberbau* (earth-level building), *Bahnbau* (railway construction), and *Hochbau* (above-earth-level building) divisions.³⁰ Two men—Kapp von Gülstein and Mackensen—were tapped to be the general construction directors of the İzmit-Ankara and Eskişehir-Konya lines, respectively. Both were free to staff their unskilled workforces as they saw fit, while skilled workers were almost entirely fellow German countrymen. Whether through ethnic preference or a general reticence to hire Turkish workers for a Turkish railway, Kapp von Gülstein and Mackensen both contracted out the majority of unskilled labor to a mélange of Ottoman Greeks, Kurds, Armenians, and Circassians, and only occasionally Turks.³¹ There is also evidence of a continued reliance on some Balkan laborers (Bonsiaks, Croats, Montenegrins). A German reporter for the *Vossische Zeitung* describing the colorful scene in Adapazarı in 1893 even mentions women workers at the base camps:

Strange images emerge from the barrack villages with the long, rough wooden stalls and working women. The various adventurous European workers often reminded me of old acquaintances from the fields of California. These vagrants give the impression of migrant-wanderers. Yet more were the colorful costumes of the Orientals, Turks, Armenians and Circassians, the Croats and Montenegrins. Even a dark-skinned son of Africa popped up here and there.³²

³⁰ Pohl, *Philipp Holzmann*, 48–78.

³¹ Ignaz Civelli, *Deutsche Schienen in osmanischem Boden: Eine virtuelle Reise mit der Anatolischen und Bagdadbahn durch Geschichte, Wahrnehmungen, Raum und Zeit* (Munich: GRIN Verlag, 2010), 61.

³² *Vossische Zeitung*, Morgenblatt, January 14, 1893. DBHI Orientbüro, OR 505. “Eigenartige Bilder boten die Barackendörfer, lange rohe Holzbuden mit arbeitenden Frauen. Da waren abenteuerliche Gestalten europäischer Arbeiter zu sehen, die mich nicht selten an alte Bekanntschaften aus den Gebieten Californiens erinnerten. Fahrendes Volk mit Frauen und Kindern machte den Eindruck von Auswanderzügen. Dazu kamen die bunten Trachten der Orientalen, der Türken, Armenier und Tscherkessen, dann der Kroaten und Montenegriner. Selbst ein dunkelhäutiger Sohn afrikanischer Erde tauchte hier und da auf.”

The reporter further commented:

There is a color cast of the society of artisans and laborers. Bricklayers and stonemasons were Greeks, Italians, Bosnians, Dalmatians, and Armenians. The workers were for the most part Kurds. A jumble of languages. The leader, who had lived for many years in the country with his family, oversaw the whole operation with great skill and care.³³

While the precise cultural negotiations remain largely unknown, both Kapp von Gülstein and Mackensen successfully managed the religious needs of their laborers—Muslim workers did not work on Friday, while Christian workers (excluding the Germans) tended not to work on Sundays.³⁴ This administrative model was largely carried over to the Baghdad railway, on which both men later worked although given the much larger Muslim labor force of that line, it is fair to presume that very little construction actually occurred on Fridays apart from the administrative work of the German engineers.³⁵

³³ Ibid. “Eine bunt zusammengewürfelte Gesellschaft bildeten die Handwerker und Arbeiter. Maurer und Steinmetze waren Griechen, Italiener, Bosniaken, Dalmatiner und Armenier. Die Arbeiter [waren] zum größten Teil Kurden. Ein Wirrwarr von Sprachen. Der Unternehmer, schon viele Jahre mit seiner Familie im Lande, beherrschte den ganzen Betrieb mit großer Umsicht und Geschicklichkeit.”

³⁴ Civelli, *Deutsche Schienen*, 61. This work schedule was, whether Kapp von Gülstein and Mackensen were aware or not, part of a longstanding tradition of labor organization since at least the days of Sinan, where Christian and Muslim subjects worked side by side in the construction of buildings, such as in the Süleymaniye complex in İstanbul whose construction processes are particularly well documented. See Ömer Lütfi Barkan, *Süleymaniye Cami ve İmareti İnşaatı (1550-1557)* (Ankara: Türk Tarih Kurumu, 1972-1979), specifically Chapter 6 (185-330), which outlines the consistent labor differences of Muslims and Christians. Necipoğlu has extended an analysis of these labor patterns in *The Age of Sinan: Architectural Culture in the Ottoman Empire* (Princeton: Princeton University Press, 2005), specifically Chapter 5 (151-188).

³⁵ Incidentally, a disproportionately large amount of correspondence by the German engineers and architects appears to have occurred on Fridays, suggesting that this was a day for desk work as opposed to site work.

5.2.4 The Hejaz Railway: Gauging the Vicissitudes of Expertise and Religion

In theory, religion played a cardinal role in the labor force of the Hejaz Railway. Because it was intended for the holy pilgrimage to Mecca and its construction fell under the auspices of Abdülhamid's caliphal stewardship, non-Muslims were expressly not desired as participants in its construction. Some have contended that this sentiment, which ultimately proved impracticable, was also related to the Ottoman desire to autonomously develop its own infrastructure and to proactively stem further European influence within the empire.³⁶ However, this seems unlikely, as the Baghdad railway unreluctantly delegated construction to the Germans in parts of the empire that had greater economic and political relevance. As discussed in Chapter One, the hiring of the Italian Labella and later Heinrich August Meißner to direct the line's construction, only reporting to the Damascus Central Commission as a matter of protocol, constitutes just one of the ways the İzzat Pasha and Abdülhamid countenanced ideological bargains in the spirit of expedient and expert construction.³⁷ Such bargains allowing non-Muslim involvement with the railway multiplied during the railway's early years as Meißner demonstrated his cultural savvy, linguistic skills, loyalty, and humility to Kazım Pasha, the Damascus Central Commission, and the Porte. So impressive were Meißner's first

³⁶ For example, Gulsoy, *Hicaz Demiryolu*, 31-40; Ochsenwald, *Hijaz Railroad*, 6-14.

³⁷ Carter Findley has detailed how the Western orientation of Abdülhamid II's regime was largely due to Mithat who, Findley suggests, was key in shaping the sultan's nascent notions of the conterminous natures of modernity and Ottomanism. Mithat's European leanings began with his work as a literary agent and encyclopedist credited with translating and popularizing many European works for Ottoman audiences. See Carter Findley, "Ahmed Midhat Meets Madame Gülnar," in *Bodies in Contact: Rethinking Colonial Encounters in World History*, eds. Tony Ballantyne and Antoinette Burton (Durham, NC: Duke University Press, 2005), 277-92.

two and one-half years of service that the Damascus Central Commission extended his contract for another two years with the added privileges of being “free from supervision” and “exempt from criticism.”³⁸ Colonel Francis Richard Maunsell (1861–1936), the British military attaché in İstanbul, noted in 1905 that Meißner “studied with the greatest care the Turkish character and always displays excellent tact in managing his superiors.”³⁹

This meant that Meißner would enjoy the ability to staff the railway with greater freedom until it reached Medina in 1908. Yet the prohibition of non-Muslims from the inner Hejaz remained steadfast, so even though construction developed well under Meißner’s subtle yet multinational workforce from Damascus southward, it would end when it reached sixty-five kilometers south of Tabuk⁴⁰ (roughly at the border of Tabuk and Madinah provinces), where Christians could (supposedly) no longer tread.⁴¹ This placed almost one-half of the railway’s extent from Damascus to Medina out of bounds for non-Muslim skilled labor. But through Meißner’s ingenuous and diplomatic forethought, it also fostered a systematized process of real-time, iterative apprenticeship between non-Muslim and Muslim laborers in the railway’s early years of growth in Syria and Transjordan. Italian stonemasons, for example, taught one troop company and sundry

³⁸ W. S. Richards to N. R. O’Conor, Damascus, March 7, 1904, NA FO 195/2165; W. S. Richards to O’Conor, Damascus, January 15, 1903, NA FO 78/5451; Ochsenwald, *Hijaz Railroad*, 30.

³⁹ Richards to O’Conor, Damascus, January 15, 1903.

⁴⁰ Tabuk was the site of the railway’s major quarantine facility. See Nicholson, *Hejaz Railway*, 82.

⁴¹ Ochsenwald, *Hijaz Railroad*, 34.

others how to build small stations and culverts, a task they would independently repeat south of the threshold.⁴²

While his apprenticeship model cultivated a proactive and very real form of transmutation, Meißner developed another system more aptly described as a sustainable transmutation. For example, while iron was the typical material of choice for constructing railway bridges (and the obligatory material for constructing the actual railway), the bridges could nonetheless be built of stone, which would allow easier and swifter repairs by future Ottoman administrators of the railway who were not familiar with iron bridges and the means to keep their condition sound.⁴³ This is precisely what was done, and it is the reason why the stonemasonry of the bridges, culverts, and station buildings of the Hejaz railway bear a striking uniformity that unites its overall program. It also attests to the duration of the apprenticeship model, signaling its critical importance across time and not just space.

None of this is to say, however, that the Hejaz Railway operated solely under Meißner's apprenticeship model. A number of Ottoman parties tactically adapted their own education and experiences to the overall project in ways that indicate the importance of transcultural encounters even prior to the railway's construction. Muhtar Bey, an original surveyor of the route and Meißner's deputy, ultimately took charge of the

⁴² *Thamarat al-Funun*, January 18, 1902, 4; *Thamarat al-Funun*, July 14, 1906, 5; René Tresse, *Le pèlerinage syrien aux villes saintes de l'Islam* (reprint, Paris: Imprimerie Chaumette, 1937), 324; Moritz Hecker, "Die Eisenbahnen der asiatischen Türkei," *Archiv für Eisenbahnwesen* 27 (1914): 1315; Karl Auler "Pasha," "Report," 6, NA FO 371/156; F. Maunsell, "Report on the Hedjaz Railway, 1907," 2, 36, NA HO 371/350; Ochsenwald, *Hijaz Railroad*, 36.

⁴³ Frederick Maunsell, "Report on Syrian Railways, 1905," 9, NA FO 78/5451; Ochsenwald, *Hijaz Railroad*, 31.

railway's completion from al-Akhdar to Medina and became a leader in the first generation of engineers graduated from the Engineering School of İstanbul.⁴⁴

Although Ottoman bureaucrats and high-level engineers were typically recruited directly from the Navy or the Army (which had been trained under von der Goltz), Muhtar Bey made a concerted effort to recruit Ottomans who had trained specifically as engineers, whether in İstanbul, Europe, or both.⁴⁵ One known example of such a hybrid was Nazif Bey al-Khalidi (1875–1916), a Sunni Muslim from an established family in Jerusalem who had studied at both the École Polytechnique in Paris and İstanbul University. Immediately after graduating, Nazif Bey traveled from Paris to Damascus, where he oversaw the construction of the station at Damascus, a number of bridges and tunnels south of it, and some additional railbed construction around Amman.⁴⁶

Meißner had initially objected to recruits from Muhtar Bey's alma mater, fearing the mens' degrees did not make up for the fact that they lacked the practical experience that graduates of European engineering programs typically acquired. But, as both Ochsenwald and Gülsoy have pointed out, this reasoning was somewhat circular, as the other railways were foreign-owned and had never employed Ottoman engineering

⁴⁴ Eleuthère Elefériadès, *Les Chemins de Fer en Syrie et au Liban* (Beirut: Imprimerie Catholique, 1944), 169; Ochsenwald, *Hijaz Railroad*, 31; *Thamarat al-Funun*, November 5, 1904, 4; *Thamarat al-Funun*, June 24, 1904, 6. A short history of the civil engineering faculty (Hendese-i Mülkiye) at the (part of İstanbul University) can be found on the university's archive website: "Hendese-i Mülkiye," İstanbul Technical University, accessed September 22, 2013, <http://www.arsiv.itu.edu.tr/tarihce/3335.htm>.

⁴⁵ Ochsenwald, *Hijaz Railroad*, 32; *Thamarat al-Funun*, April 28, 1902, 4; *Thamarat al-Funun*, March 3, 1903, 3; *Thamarat al-Funun*, June 24, 1904, 6.

⁴⁶ Ochsenwald, *Hijaz Railroad*, 34.

graduates.⁴⁷ Meißner ultimately backpedaled from this position, probably as a result of the Sultan's explicit request that half of all engineers graduated from the School of Engineering at İstanbul University be given jobs on the Hejaz Railway.⁴⁸ In 1903 this meant only seven graduates, but the number steadily increased over the next four years.⁴⁹

It is also important to note that the international component of the railway construction was not limited to Germans, a fact as well as an aspect of transmutation. Prior to Meißner's arrival, La Bella had advocated for 7,000 paid positions to supplant soldier-builders, a system he believed was not working.⁵⁰ His request, which specifically stipulated Egyptian and Italian nationals, was not accepted, likely because the Porte was not ready to end the railway's connection to the military.⁵¹ By 1902, tensions between the Italian workers who had been hired and the Arab soldiers were out of hand. A British consular report relays that

the Italian workmen, generally, who are employed on the construction of this line as well as on the Ryak-Hama Railway, have been behaving so badly and are so constantly coming into collision with the natives that the vali has 'requested' (some say 'ordered') the contractors to cease to employ them in the future. This prohibition, if insisted on, will affect at least 1,500 workmen—between the two lines, whose places will be very difficult, if not actually impossible adequately to fill. The Italian ... is an excellent workman—ininitely superior to the natives of this country—but he has three serious defects; he drinks heavily as soon as his day's work is done, he is always ready with his knife and he is somewhat loose in his morals. If to these three factors a fourth be added viz: his absolute ignorance of the language of the country in which he is working, all the necessary elements of a serious disagreement with its inhabitants are present at one and the same time.⁵²

⁴⁷ Muhammad Kurd 'Ali, "Sikkat al-Hijaz," *Al-Muqtataf* 29 (1904): 970; Ochsenswald, *Hijaz Railroad*, 33; *Thamarat al-Funun*, February 18, 1903, 2; *Thamarat al-Funun*, October 28, 1903, 4.

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ W. S. Richards to W. E. de Bunsen, Damascus, December 5, 1900, NA FO 78/5452, 43–44b.

⁵¹ Ibid.

⁵² W. S. Richards to N. R. O'Connor, Damascus, February 8, 1902, NA FO 78/5452, 93–93b.

The problems with La Bella's Italian countrymen may have factored into Meißner's rejection of the pan-German favoritism that was commonly exercised on the Baghdad Railway when he assumed La Bella's position the following year. Between 1903 and 1907, Meißner had employed forty engineers, half of whom were foreign.⁵³ Of those, about half were German, with the others hailing from Belgium, Switzerland, and France.⁵⁴ Unskilled labor, typically assumed to have been performed exclusively by Ottoman soldiers, actually had a sizeable foreign composition, particularly in the northerly areas of Syria where, in 1902, non-Ottomans comprised 1,500 of the 5,000 unskilled laborers.⁵⁵ Even in Transjordan and around Tabuk, the record shows 600 unskilled foreign workers, including Austrians, Italians, Greeks, and Montenegrins whose work was largely limited to stonework⁵⁶ [Fig. 5.4]. To assuage problems between workers, such as those between the Arabs and Italians, the Central Administration proposed that foreign nationals working on the railway assume a provisional Ottoman citizenship to avoid perpetual entreaty to diplomatic intervention for solutions to violent intercultural schisms. The European consulates staunchly rejected the idea.⁵⁷ Needless to say, schisms also existed between the various regiments of Ottoman workers who often

⁵³ W. S. Richards to N. R. O'Connor, Damascus, March 23, 1903, NA FO 195/2144; J. Monahan to N. R. O'Connor, Haifa, January 28, 1904, NA FO 195/2165; Herrmann Guthe, "Die Hedschasbahn von Damaskus nach Medina: Ihr Bau und ihre Bedeutung," in *Länder und Völker der Türkei* (Leipzig: Gaebler, 1917), 16; Ochsenwald, *Hijaz Railroad*, 33.

⁵⁴ Nicholson, *Hejaz Railroad*, 22.

⁵⁵ *Thamarat al-Funun*, October 6, 1902, 5; Ochsenwald, *Hijaz Railroad*, 34.

⁵⁶ Ochsenwald, *Hijaz Railroad*, 34.

⁵⁷ W. S. Richards to N. R. O'Connor, Damascus, February 8, 1902, NA FO 78/5454; W. S. Richards to N. R. O'Connor, Damascus, April 5, 1902, NA FO 195/2122; A. Goodrich-Freer, *In a Syrian Saddle* (London: Meuthen), 73.

did not understand the Turkish or Arabic of their counterparts and superiors.⁵⁸ There was, nonetheless, considerable motivation to work on the Hejaz railway as an Ottoman soldier: every three years of service counted as four years of military conscription, and two years of service expedited the process of promotion (a frequent occurrence).⁵⁹

Civilians, whose role in the railway is also understudied, were typically hired as subcontractors for skilled or project-specific work, including station and bridge construction. Typically, these civilians were day workers (i.e., they did not lodge with the regiment workers) who originated from the immediate vicinity of a work site and may have been paid in food and clothes rather than money at times. Ochsenwald notes that civilian workers often suspected that work for the railway was *corvée*.⁶⁰ Although this was not true, unpaid labor was an option for peasants who could not or did not wish to pay the *corvée* road tax.⁶¹ Forced labor in Palestine by local Arab residents who had not paid taxes is documented for the Haifa-Daraa branch.⁶² And while rarely employed by the railway, Circassian colonists in its vicinity went to considerable lengths to defend and bolster its construction in the name of their own economic interests.⁶³

⁵⁸ Durham, "The Hedjaz Railway," 4.

⁵⁹ W. S. Richards to N. R. O'Connor, Damascus, January 13, 1902, NA FO 78/5452; *Thamarat al-Funun*, August 16, 1904, 5.

⁶⁰ Ochsenwald, *Hijaz Railroad*, 36.

⁶¹ *Ibid.*

⁶² *Thamarat al-Funun*, December 17, 1900; Charles Gaillardot to Theophile Declassé, Haifa, April 26, 1903, MAE Turquie Chemins de fer, 320; Sir Robert Hay Drummond-Hay to N. R. O'Connor, April 14, 1903, NA FO 195/2140.

⁶³ Nicholson, *Hejaz Railway*, 25.

Although relatively rare, two non-European contractors are known to have done significant work in the construction process. Husayn Haydar Bey (fl. 1895–1910), a member of the esteemed Mutawali family from Baalbek, built the seventy-kilometer stretch from Muazzam to Dar al-Hamra in addition to all of the stations to its south.⁶⁴ Sa'd al-Din al-Dimashqi (fl. 1900–1910) built several of the stations between al-Kiswah and Maan and conducted some of the masonry without European assistance.⁶⁵

5.2.5 The Baghdad Railway: Internationalism, Deliberate and Accidental

While race and religion played a more explicit role in the formation of the Hejaz Railway's workforce, they were equally salient in the construction of the Baghdad Railway, in part because its chronological and geographical spans (fourteen years and 1600 kilometers) were longer than any other line planned within the empire. The railway from Konya to Baghdad was divided into four subsections of different lengths, yet roughly equal in the labor required; these went from Bulgurlu to Durak, Durak to İslahiye, İslahiye to Tell Halaf, and Tell-Halaf to Baghdad, with Ereğli, Adana, Aleppo, and Baghdad, respectively, serving as the sections' headquarters. Each section had a chief engineer, a deputy engineer, three to eight section engineers (each overseeing a five to twenty-five kilometer portion), twenty to forty secondary section engineers, architects, and architect assistants, eighteen to sixty bureaucrats and bookkeepers, and ten to fifty

⁶⁴ Ochsenswald, *Hijaz Railroad*, 41. Ochsenswald writes that Husayn Haydar Bey employed Europeans. Haydar Bey did not, however, draw the plans of Medina station.

⁶⁵ *Thamarat al-Funun*, April 3, 1904, 3; *Thamarat al-Funun*, September 10, 1902, 5; *Thamarat al-Funun*, Haziran 27, 1904, 2–3.

technical specialists (bridge workers, pyrotechnic experts, borers, etc.).⁶⁶ All unskilled labor was executed by massive forces of thousands of men aged fifteen to fifty, some apparently arriving on foot from as far away as Shiraz.⁶⁷ [Fig. 5.5]

While squarely under German management, the Baghdad Railway Company had a consistently multicultural face. In addition to payment records, accounts by journalists and travelers testify to the workforce's composition from Konya to Bulgurlu in the initial years.⁶⁸ The upper-level engineers included some Austrians and Britons in addition to Germans.⁶⁹ Minor officials were Turkish, Greek, or Armenian.⁷⁰ Masons and other skilled trade workers were frequently Italians.⁷¹ Between 1905 and 1908, a considerable amount of unskilled labor was allocated to Kurdish workers, most of whom would likely have traveled to Konya from southeastern Anatolia in search of work.⁷² The composition of unskilled labor in later years tended to more closely reflect a cross section of the population in and around each particular section's headquarters, comprising various admixtures of Turks, Kurds, Arabs, and, in some instances, Albanians.⁷³ Their work was mundane and intensive: moving, loading, and unloading materials, removing stone and

⁶⁶ McMurray, *Distant Ties*, 86.

⁶⁷ Ibid., 87. Concerning Persian workers, see Arthur F. Townshend to N. R. O'Connor, Adana, March 23, 1904, NA FO 406/19, 80.

⁶⁸ McMurray, *Distant Ties*, 54.

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Ibid.

⁷² Ibid.

⁷³ McMeekin, *Berlin-Baghdad Express*, 87.

earth, and clearing brush and trees from the track's path. The accompanying police were always Turkish.⁷⁴ Drawing upon earlier experiences in the Anatolian railways' construction, the Baghdad Railway Company separated the unskilled labor force, virtually always Ottoman, by ethnic groups. They were assigned tasks as subgroups and sent to locations where they would not mix with other Ottoman groups.⁷⁵ A liaison in each group was responsible for reporting to management and enjoyed a fair amount of autonomy as both taskmaster and disciplinarian, which often made for draconian scenes of exhaustion and punishment.

The Baghdad Railway Company's pay scale, at least in the beginning, was significantly stratified, and most who have analyzed the records have discerned that wages were essentially consonant with nationality.⁷⁶ Turkish miners received an average of 24 piasters per month to an Italian's 40.⁷⁷ The lowest-level workers—porters and simple helpers—were always Ottoman and earned no more than 17 or 12 piasters per month, respectively.⁷⁸

The German upper management of the Baghdad Railway Company (speaking French, the official language of the railway) made every effort to use the early construction years as times of apprenticeship for Turkish workers.⁷⁹ This special attention

⁷⁴ Fraser, *The Short Cut*, 16–17.

⁷⁵ McMeekin, *Berlin-Baghdad Express*, 87.

⁷⁶ “Zweiter Breicht an die Generalsammlung der Aktionäre,” September 23, 1911, Gesellschaft für den Bau der Eisenbahnen in der Türkei, 80–82 in Ba 7990, 10.

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ Fraser, *The Short Cut*, 16–17.

paid to training Turkish workers can be interpreted in two ways. On the one hand, it has can be viewed as an investment tool: if a critical mass of Turkish workers thoroughly understood the ins and outs of the construction process, they would effectively speak the same language, making translation and transmission of the construction process less opaque and more expedient. On the other hand, it has been seen as a strategic tool the Germans used to reduce the non-Ottoman workforce, which cost more to employ and also posed potential geopolitical liabilities.⁸⁰ David Fraser interpreted the apprenticeship in purely capitalist terms:

The fact is that the people who run the line, though German, care first for their own pockets and next for Germany. They buy or employ what is cheapest or most suitable, and do not care a finger-snap for the origin of an article or a servant. True, much material must be of German manufacture in order that they retain the political and diplomatic support essential to their welfare in the future. But that support secured, in the case of most German enterprises in Turkey... patriotism occupies a small place in the calculations of the promoters... The master impulse... is to make money for himself as quickly as possible.⁸¹

The advent of the workers' strike of 1908, which demanded from the German management a deeper sensitivity to cultural and religious differences, and the geopolitical pressures of the Young Turk Revolution began to chip away at the railway's culturally ambivalent (read capitalist) façade. The Baghdad Railway Company, led by the German engineers in Adana and the Amanus Range, successfully used employment with the company as a safe harbor for both existing and swiftly hired Armenian employees in the region facing the threat of deportation.⁸² While the Germans' friends—the Italians and Austrians—continued their service, all Britons on the railway were phased out between

⁸⁰ Ibid.

⁸¹ Ibid.

⁸² Charles Marling to Edward Grey, Constantinople, November 5, 1909, NA FO 406/24, 37.

1909 and 1911.⁸³ This even applied to Maltese and Cypriot workers, subjects of the British crown, who were abruptly terminated when the company acquired the formerly British branch line to Mersin.⁸⁴

Although the 1908 labor strike posed the most direct challenges to the Baghdad Railway's human resource policy, the Italo-Turkish War of 1911–12, in which Italy captured the Ottoman provinces of Tripolitania, Fezzan, and Cyrenaica, prompted the most significant human resource crisis. Because of the conflict, the Baghdad Railway Company and its armatures were forced to abruptly dismiss all Italian workers from service.⁸⁵ These workers accounted for almost all of the labor force's skilled masons, which were in critical demand at the time of their dismissal, given the number of stone rail bridges and new stations being built. At the directive of the Ministry of the Interior, the Baghdad Railway Company recruited stopgap replacements from local Turkish and Arab populations, where stonemasonry traditions varied greatly from those of the Italians in both quality and technique⁸⁶—close inspection of some of the structures left unfinished by Italian masons reveal a visible difference in technique and materials, including the adoption of concrete as an expedient solution. [Fig. 5.6] A paradox emerged: the Baghdad Railway Company regularly bemoaned the quality of the work, while the newly

⁸³ George Mounsey, "Notes on Journey from Eregli to Adana," report submitted to Gerard Lowther, Pera, May 1910, NA FO 406/35, 120–121. See also E. C. Donaldson Rawlins to Gerard Lowther, Adana, April 8, 1910, NA FO 881/9729, 92.

⁸⁴ Mounsey, "Notes on Journey," 120–121. Rawlins to Lowther, Adana, April 8, 1910, 92.

⁸⁵ McMurray, *Distant Ties*, 93.

⁸⁶ *Ibid.*

enfranchised workers grew more demanding of better wages, given the perceived importance of their new roles.⁸⁷

Indeed, worker wages codified the perceived importance of a given craft as much as ethnicity had tended to codify the craft that a given worker would practice. Yet it is relevant to note the very real effects that the workers' strike of 1908, the reduction of the number of Armenian laborers, and the dismissal of the English and other workforces had in closing the gap between various workers' wages. Whereas wages between simple handymen (*Handlangers*) and supervisors (*Aufseher*s) had about an 800% differential in 1907, Holzmann's records indicate that the gap had shrunk to 550% by 1912.⁸⁸ Additionally, all skilled and unskilled workers witnessed an increase in pay that surpassed the rates of inflation: diggers/excavators (*Erdarbeiters*) earned 14 piastres per day, artisans (*Handwerker*s) 30, miners (*Mineurs*) 35, and quarrymen (*Steinhauers*) 40.⁸⁹ This was, in all likelihood, as much a product of the imperatives of greater ethnic and religious equanimity as of the simple fact that Germans (and some Austrians) as well as Ottomans were needed for a wider swath of both skilled and unskilled labor roles as the railway's multinational character ebbed.

Reports from the German consulate in Adana offer perhaps the most revealing accounts of the ramifications of a decade of geopolitical vicissitudes for the Baghdad Railway's multiethnic character. In the early years, reports document myriad conflicts and crimes (including murder and robbery) committed between railway employees that

⁸⁷ Ibid.

⁸⁸ ISg W1/2 518.

⁸⁹ ISg W1/2 518, 10.

typically centered on questions of ethnicity: Greeks retaliating against Turks for various perceived injustices committed on the construction sites, Arab and Turkish workers rising up against German administrators to protest cruel administrative tactics, Armenians desperately seeking protection from persecution by marauding locals, and so on.⁹⁰ As the years went by and the labor groups decreased in their multiethnic composition and also came to get to know one another better, disputes (typically the only thing the consulate reported to Berlin) took on *cultural* as opposed to *ethnic* undertones. Alcohol, for example, had become a major theme by 1911, as Muslim workers complained about their non-Muslim counterparts' overconsumption during off hours.⁹¹

With the advent of the Great War and the incorporation of prisoners of war into its workforce, the Baghdad Railway reassumed some of the multinational character that had dwindled in the years leading up to the war. Beyond the obvious differences, the ethnicity and nationality in this new multinationalism were not automatically consonant with craft. In fact, the effect would be anathema to the former system. Because of the prisoner of war's very status—be he French, Australian, Indian, or Russian—and perhaps because his training was as a soldier and not as craftsman, the labor performed by prisoners of war comprised, with few exceptions, the harshest and most menial of the jobs that remained to connect the railway from Bulgurlu to Baghdad.

While united under their German and Ottoman auspices, the ethnic and religious composition of the labor forces constructing the Ottoman railway network simultaneously establishes the complexity and the wider diversity of the transmutation paradigm. To

⁹⁰ The accounts are numerous. See AA Konsulat Adana 17–20.

⁹¹ Notice 23895 from the Département Impériale des Travaux Publics, retransmitted by Hans von Wangenheim, Pera, October 24, 1912, AA Konsulat Adana 19.

reduce the framework of exchange to a dialectical one—German and Ottoman—would be to ignore a critical array of actors, often in the majority, who infused the German-Ottoman partnership with subnational, national, religious, and secular tones. This pronouncement is, to a large degree, unsurprising, with its clear postpositivist and poststructuralist resonances. But the task of unearthing these actors and explaining who they were, what they did, and why, is necessary for understanding the complex weave from up close, not from far away. Moreover, the task leads to the further steps of reascribing agency, understanding in which contexts agency was created or admonished, and recalibrating the process of transmutation accordingly.

5.3 Labor Law: Frameworks for Life, Work, and Construction

5.3.1 Procedural Aspects of a Legible Aesthetic Network

A picture of everyday life on the Ottoman rail network's construction sites comes to us from a variety of sources, including governmental and consular archives, construction firm and subcontractor records, first-hand accounts such as diaries and travel stories, and, most abundantly, photographs—some of which have been unearthed from private collections. While the enumeration of the railway network's polycultural character within the German-Ottoman superstructure provides a more complete picture of *who* built the railways, an account of *how* they were built is the necessary next step in explicating the process of its transmutation. Unsurprisingly, given the massive amounts of politics, time, money, and human capital involved, it was a process whose contours,

like the labor forces, varied from work site to work site. Nevertheless, there are some remarkable consistencies in both the process and the output, and these reflect, more than anything, the intelligibility and rigidity of the German way of building railway beds, tracks, culverts, tunnels, bridges, stations, workshops, and other facilities. Although the Ottoman railway network is typically considered as an aggregation of discrete lines (the Baghdad and Hejaz lines being the most heroic), the railway network built through the German partnership (its vast majority) imparted an exceptionally cogent aesthetic program as it stood in 1919.

This legibility derives in large part from the bureaucracy of the German construction process, which was something of a tacit doctrine, even for the ostensibly autonomous Hejaz Railway. The paradigm was formed first and foremost by the railway network's various discrete concessionary agreements, which spelled out construction methods, resources, protocols, and policies explicitly and in painstaking detail.⁹² A second factor in the legibility of the network is attributable to the regular carrying over of personnel: the main engineers involved—Pressel, Kapp von Gülstein, Mackensen, and Meißner above all—were freely transferred for work from one line to another. Here we have a demonstration of adaptive pressures, as, more often than not, these men had to reappropriate their knowledge and construction systems for variables beyond the composition of the labor force, which was constantly changing. These included technological advances (which in this period happened at a breakneck speed for rail and were quite different in 1868 than they were in 1919), administrative structures, the relative hospitality of the local political circumstances, and climate—which ranged from

⁹² As a general rule, the statutes and concessions of the railways tended to become more detailed (and complicated) as time went on.

the harsh winters of the Dinaric Alps (Banja Luka's average temperature in January is 31° F) to the scorching heat of the upper Hejaz (Tabuk's average temperature in July is 102° F).⁹³

A third factor contributing to the network's aesthetic legibility was the capacity for inflection from the transmutation process. Despite the rigid bureaucratic and personnel superstructure, there was abundant room for aesthetic timbre. Although these inflections tended to be subtle, their pervasiveness cannot be dismissed. The inflections came through tactical channels that were more commonly associated with the massive multicultural labor force than with any ideology or explicit strategy of the German-Ottoman superstructure. In this vein, we turn to the matter of *how* with an examination of important elements of the network's construction process and an additional spotlight on the procedural mechanisms and historical conditions for the inflection process.

5.3.2 Building Codes: Specifications and Authorial Openings

Agreements between the railway companies and the Ministry of the Interior and/or the Ministry of Commerce and Public Works covered the overall range of objectives for each line. Each bulky document contained a main subdocument consisting of approximately fifty articles appended with an ad hoc series of statutes and a crucial *Cahier des Charges* (Work Specifications) document. As a whole, the documents primarily concerned the specifics of financial arrangements spanning everything from

⁹³ These are contemporary numbers and may reflect some historical differences. Culled from <http://www.weatherbase.com>, accessed September 16, 2013.

kilometric guarantees and details of ninety-nine-year concessions to tariffs for dogs and chickens traveling on the railway. The articles of the concession and the first section of the *Cahier des Charges* delineated virtually all relevant construction information, and certain topical articles appearing in all of the agreements assessed a handful of items particularly relevant to the present study.

The 1903 articles for the Baghdad Railway are typical and contain three articles that are particularly instructive in revealing certain open elements of the network's evolving transmutation. Article Eight relates to taxes on materials for building purposes:

The material of the [railway:] irons, wood... machines, cars and wagons, and other supplies necessary for the first settlements as well as expansions ... [to] the railway and its depots, whether purchased within the [Ottoman] Empire or abroad, will be free from all domestic taxes and customs duties.⁹⁴

The elimination of all tax burdens for the import of materials created a considerable incentive to mix the materials and machinery used to construct and create the railway and its structures into a delicate international balance of cost and quality. Such mixing often meant that Ottoman materials and products, when sufficient for the best practices of German engineering and architecture, would be employed for their cost-effectiveness. When they were not sufficient, as was often the case with technologically critical items (rail switches, lighting, boring equipment, scales, etc.), there was to be no hesitation to have them brought in from abroad.

Article Ten relates to the acquisition of wood:

⁹⁴ "Conventions, &c., relating to the Bagdad [sic] Railway: 1903 to 1908," NA FO 881/9803. Article 8: "Le matériel de la voie et les matériaux, fers, bois, bouille, machines, voiture et wagons, et autres approvisionnements nécessaires au premier établissement, ainsi qu'aux agrandissements et augmentations en général du chemin de fer et de ces dépendances que le concessionnaire achètera dans l'Empire ou qu'il fera venir de l'étranger, seront exempts de tous impôts intérieurs et de tous droits de douane."

The wood framing for the construction .. of the railway will be cut in the nearby forests belonging to the state in accordance with [Ottoman forestry] regulation thereof.⁹⁵

This clause created a *carte blanche* for deforestation, a heavily regulated practice in the Ottoman empire, and promoted the liberal employment of wood as building material when available. Moreover, it cultivated a diversity among the types of wood employed, given the particular species found in the empire's forested areas—Turkish oak pine, Lebanon cedar, Aleppo fir, pistachio, juniper, and laurel, to name a few.⁹⁶

Article Twenty-Seven concerns the treatment of antiquities encountered in the construction process:

Art and antique objects discovered during construction will be subject to the [Ottoman] rules governing the matter.

However, the licensee is exempt from the obligation to apply for and obtain authorization for the research.⁹⁷

⁹⁵ Ibid. Article 10: "Les bois et charpentes nécessaires à la construction et à l'exploitation du chemin de fer pourront être coupés dans les forêts voisines appartenant à l'Etat conformément au règlement qui y est relatif."

⁹⁶ The practice of forestry changed dramatically under Tanzimat reforms and spawned, among other things, the empire's first forestry academy (*Orman Mektebi*) and the first forestry regulation (*Orman Nizamnamesi*) in 1870. Although the forests were supposed to be protected by the imperial authorities, it was the government itself that most frequently broke its own rules. Shaw and Shaw note that in 1897 alone, a remarkable 350 million cubic feet were cut for civic purposes, including railroad construction around existing and future lines. See Stanford J. Shaw and Ezel Kural Shaw, *History of the Ottoman Empire and Modern Turkey*, vol. II, *Reform, Revolution and Republic: The Rise of Modern Turkey, 1808–1975* (Cambridge: University of Cambridge Press, 1977), 235–36. Selçuk Dursun, Assistant Professor of History at Middle East Technical University (METU), has conducted an interesting study comparing the ways that French and German models influenced forestry practices in Ottoman lands. This work has not yet been published.

⁹⁷ Ibid. Article 27: "Les Objets d'art et d'antiquités découverts pendant les travaux seront soumis aux règlements régissant la matière... Toutefois, le concessionnaire sera dispensé de la formalité de présenter une demande et d'obtenir une autorisation pour les recherches."

Although this topic is discussed in much greater detail in Chapter 4, here one may note that the article provides an implicit incentive, in connection with the production of new structures, for the railway to locate itself near sites of archaeological interest.

Point One of the Cahier des Charges outlines a number of important material and procedural specifications relating to the “disposition” of station buildings, their representation and approval, and their relation to their immediate environment. Key excerpts from Article Eleven bear quoting at length:

The concessioner will construct works [from] as good quality materials [as are to be found in] the country and must comply with best practices in order to obtain as perfectly solid a construction as can be constructed from the [given] material.

Bridges and culverts constructed over rivers or public and private roads and aqueducts will be built in stone, iron, or steel, wood will be used in foundations, and aprons and girders shall be placed under the rails. Metal bridges 10 meters in range and beyond will, prior to [usage, be] subject to a test in accordance with [standards of] approval [by] the Ministry of Public Works....

Steel bridges will be calculated according to the latest circular from the Ministry of Public Works, from France or Prussia....

The track crosses, & c. [sic] are the type adopted by the railways of the Prussian state.

Regarding the provisions and construction of buildings, stations, and booths, it is agreed that the rules of strict necessity be maintained, [keeping] in mind the convenience and ordinary customs of the country.

Stations will be built of stone or brick, they may have flat roofs and floors of stone, brick, or concrete.⁹⁸

⁹⁸ “Société Impériale ottomane du chemin de Fer de Bagdad [sic], Cahier des Charges”, NA FO 881/9803. Article 11: “Le concessionnaire n'exploitera, dans l'exécution des travaux, que des matériaux de bonne qualité pris dans le contrée, et il devra se conformer à toutes les règles de l'art, de manière à obtenir une construction parfaitement solide tant des ouvrages que du matériel... Les ponts et ponceaux à construire sur les cours d'eau ou sur les voies publiques et privées, ainsi que les aqueducs, seront construits en pierre et en fer ou en acier; le bois ne sera employé que dans les fondations, les tabliers et les longrines à placer sous les rails. Les ponts métalliques de 10 mètres de portée et au delà seront, avant la réception, soumis à l'épreuve conformément au programme qui sera présenté à l'approbation du Ministère des Travaux Publics, en même temps que les projets de ces ouvrages... Les ponts métalliques seront calculés suivant la dernière circulaire du Ministère des Travaux publics, soit de Prusse soit de France... Les rails, traverse, etc., seront du type adopté par les chemins de fer de l'État prussien... En ce qui concerne les dispositions et la construction des bâtiments, des stations, et des guérites, il est convenu que

This clause set up an important array of regulations as much as it did opportunities for the construction process. On the one hand, the outline of permissible materials for bridges and the process for testing them is rather rigid. On the other, the guidelines for the construction of railway stations paint only the vaguest hint of an aesthetic program, as it were. That “flat roofs” are permissible is, perhaps, the single most recognizable acknowledgment of stylistic concerns, with elliptical reference to protomodernist sensibilities. What is clearly of greater import, however, is the overall sturdiness, durability, and strength of the structures, which must be made of the strongest possible materials available in the land (and, we may assume, abroad, given the content of Article Eight).

The “rules of strict necessity” and “ordinary customs of the country” are the most culturally significant provisions, which tacitly imply a handful of cultural norms that the Ottoman government intended to reinforce and highlight. While these most clearly include the need to divide men and women, the meanings in regards to spatial patterns of privacy, discretion, and inhabitation were more subject to interpretation: there were no explicit directives concerning what these cultural norms and rules actually were.

Article Twelve states:

The general plan to be presented by the concessioner [will utilize]... detailed nomenclature and the main provisions shall be the avoidance of... crossings, bridges, aqueducts and viaducts [both] above and below all the [railway lines and structures] proposed to be built.

Plans of stations and structures will be prepared at a scale of 1/200.⁹⁹

les règles de la plus stricte nécessité seront maintenues tout en n'ayant en vue que la commodité et les usages ordinaires du pays... Les Stations seront construites en pierre ou en briques; elles pourront avoir des toits plats, des planchers en pierre, briques ou béton...”

⁹⁹ Ibid. Article 12: “Au plan général qui sera présenté le concessionnaire joindra un tableau faisant connaître la nomenclature détaillée et les principales dispositions des gares d'évitement et

This clause makes it clear that existing infrastructure was to be avoided at all costs in the railway's planning and indicates both a pragmatic and a conservationist impulse on behalf of the Ministry of the Interior. The requirement of a 1 = 200 drawing scale for a structure with a spatial envelope that was smaller than most industrial structures is noteworthy. After all, when disparately sized structures, say a small sentry booth and an entire massive factory, are rendered at the same scale, the relative detail and articulation of the smaller structure in relation to the larger one tends to make it look flatter and scaleless and diminishes its potential for ornamental embellishment. Conversely, since buildings—while being built—are rarely constructed from drawings alone, the potential for ad hoc ornamentation and detailing increases in inverse proportion to the scale of the original drawings. Indeed, the drawings of several of the railway's structures lack the detail they actually exhibit in situ, making clear the dynamic role played by the artisans.

Lastly, Article Thirteen explains:

At the crossing [of] towns and villages... station [buildings]... if deemed necessary, will be separate[d] [from other] properties and riverbanks with fences.¹⁰⁰

Even casual observation of the railway network will reveal the ubiquitous presence of wooden fences in cities and villages, and sometimes next to rivers, clearly demarcating the railway's property from the rest of its environs.¹⁰¹ The urban, not to mention aesthetic, effects of this zoning strategy have a deep import for many of the railway's

de stationnement, des passages à niveau, des ponts et aqueducs, des viaducs par-dessus et par-dessous le chemin de fer, et de tous les travaux qu'il se propose d'effectuer... Les plans des stations et des ouvrages d'art seront dressés à l'échelle de 1/200."

¹⁰⁰ Ibid. Article 13: "A la traversée des villes, villages, et aux stations, la voie sera, s'il est jugé nécessaire, séparée des propriétés et des bâtiments riverains par des clôtures."

¹⁰¹ The exception is the Hejaz railway, where stone walls of varying heights virtually always served this purpose.

encounters with settled population centers. One thing is clear: fencing off property, particularly with orderly wooden fences, is by all estimations a primarily European practice, not an Ottoman one, which demonstrates how this banal clause came to produce a lasting urban *causatum*.

The railway companies did expand upon certain details of the construction process in the *Cahier des Charges*; these vary in their level of specificity but nonetheless demonstrate the unparalleled capacity the railway companies had for custom tailoring aesthetic programs for the railway. The *Cahier des Charges* issued to workers on the second section of the Baghdad Railway (Bulgurlu–Tell Halaf) appear to be the most specific.¹⁰² These documents, demure in size, have the appearance of handbooks meant to be carried around for reference and are principally concerned with methods of construction for the railbed itself. They do, however, set out important general terms for the materials to be used and the procedures of masonry construction, which directly bear on the construction of the railway's attendant structures: tunnels, bridges, stations, and other collateral buildings. The terms include the stipulations that timber be used only in good seasons,¹⁰³ that sand for mortar be derived from pits approved by the railway company,¹⁰⁴ and that Portland cement be used exclusively when cement was required.¹⁰⁵

¹⁰² ISg W1/2 518. I refer here to the *Cahier des Charges* accompanying a work contract between Mavrogodato and a certain “Jehany Bey Ismet Hacky,” signed in Ereğli on June 14, 1912. The document was produced as a template in 1911 in İstanbul.

¹⁰³ *Ibid.*, 6.

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

The production of brick and mortar, which were employed only in the construction of the network's buildings, was detailed as follows:

Bricks: The bricks will come from the best existing kilns... in the country or from other sources that may be prescribed. They shall be made with pure clay containing no part of lime... well cooked without being vitrified, perfectly rectangular without warping, [and] the most beautiful will be reserved for siding. Their dimensions are those customary in the country if they are not otherwise determined by the [railway company].

Mortars: ...mortars used in masonry shall be composed of lime and sand or Portland cement and sand in the proportions indicated in the *Série des prix* and... will be [of a] consistency [like] firm dough that can be easily removed with a trowel and have the appearance of a paste and not mud. The amount of mortar made will be such that it can be used without delay for the execution of the masonry... The mortar will be made in the sunlight on areas of boards or sheet metal.¹⁰⁶

Further specifications concerning the masonry for culverts, foundations, and screeds stress qualitative and procedural standards over aesthetic ones.

Although aesthetic concerns are absent from the section of the *Cahier des Charges* describing the perforation of tunnels, which along with certain bridges demonstrate some of the railway's most impressive stonework, the procedural protocol reveals that designs and on-site decisions were left primarily to the section engineer:

The nature and thickness of the masonry shall be determined by the engineers of the Company, by section, depending on the nature of the land and favored by the entrepreneur, who shall make cuttings accordingly.¹⁰⁷

¹⁰⁶ Ibid., 7: “Briques: Les briques proviendront des meilleurs fours existants ou seront à créer dans le pays ou d'autres provenances qui pourraient être prescrites. Elles seront faites avec une argile pure ne contenant aucune partie de chaux, et seront dures, sonores, bien cuites mais non vitrifiées, parfaitement rectangulaires sans gauchissement; les plus belles seront réservées pour les parements. Leurs dimensions seront celles usuelles dans le pays si elles ne sont pas déterminées autrement par la Société... Mortiers: Les différentes qualités de mortiers à employer dans les maçonneries seront composées de chaux et de sable ou de ciment Portland et de sable dans les proportions indiquées dans la *Série des prix* et suivant la prescription des ingénieurs dans la *Série des prix* aura la consistance d'une pâte ferme qui puisse être facilement enlevée à la truelle et avoir l'aspect d'une terre humide et non de boue. La quantité de mortier fabriqué sera telle qu'on puisse l'employer sans retard pour l'exécution de la maçonnerie.... Le mortier sera fabriqué à l'abri du soleil sur des aires en planches ou en tôle...”

¹⁰⁷ Ibid., 19: “La nature des maçonneries et leurs épaisseurs à exécuter dans chaque cas seront déterminées par les ingénieurs de la Société, par section, suivant la nature des terrains et indiquées à l'Entrepreneur qui devra faire les déblais en conséquence...”

While the scale of the preparatory drawings for the railway network's *Hochbau* was defined in the railway company's agreement with the Ministry of the Interior, the process for its review and approval was typically established between the railway company and the contracting construction firm—which was, in all cases but the Hejaz railway, a German company (and in the case of the Hejaz railway, under the directorship of Meißner). This is perhaps the most significant document outlining the bureaucracy of the transmutation process. The standards established with Philipp Holzmann GmbH, given its role as the contracting construction firm for both the Anatolian and the Baghdad railways, is the most significant. The agreement reads as follows:

Execution of plans: The preparation of the final plans of the buildings is to be done by the contractor (Philipp Holzmann GmbH). Each completed plan is to be first presented to the railway company (The Baghdad Railway Company), who will examine it and [suggest] amendments or supplements that will in turn be returned and presented for authorization from the Turkish government by the railway company. The final [plans] approved are thereafter to form the basis for their construction and may... not be changed without the express written permission of the [railway] company—except on insignificant deviations caused by local conditions.¹⁰⁸

The “deviations” caused by local conditions are, throughout the reams of contracts, concessions, and *cahiers de charges* providing the legal background of the Ottoman rail network, typically material ones—deviations of species of wood, types of stone, brick, and mortar, etc. The documents do not define other potential forms of deviation—such as

¹⁰⁸ ISg W1/2 518. The document referred to is a template “Bauvertrag” between Holzmann and its subcontractors, which also included architects who were not on the staff. “Ausführungspläne: Die Ausarbeitung der definitiven Pläne der Hochbauten erfolgt durch den Unternehmer. Die jeweils fertiggestellten Pläne sind zunächst der Baugesellschaft zu überreichen, welche die Pläne prüfen beziehungsweise zur Aenderung [sic] oder Ergänzung zurückgeben und die weiter etwa erforderliche Genehmigung seitens der Bagdadbahn und der türkischen Regierung herbeiführen wird. Die hiernach endgiltig [sic. (endgültig)] von der Baugesellschaft genehmigten Pläne bilden die Grundlage für die Bauausführung und dürfen im Laufe der letzteren - abgesehen von unwesentlichen, durch lokale Verhältnisse bedingte Abweichungen - ohne ausdrückliche schriftliche Genehmigung der Baugesellschaft nicht geändert werden.”

the skills of one labor group in comparison to another and climatic or cultural concerns—and they most certainly do not articulate “deviation” as a term that could encompass cultural variegation or, as a consequence, different manipulations of architectural elements or cultural signification.

As has been noted, architectural signification was not really a priority, but this does not mean that meaningful deviations did not happen, and the clause above reveals a twofold window of opportunity for those shaping the railways. First, changes to architectural drawings that were sought after the Turkish government’s approval did not need to be reapproved by the government but only by the railway company, which was thus placed in the role of arbiter and compromise-broker, determining which architectural changes deemed necessary on-site were sufficiently “deviant” from the original plan and which were not. Architectural changes deemed too “deviant” could be made possible, in all likelihood, by middle-ground solutions mediated by the railway company. Moreover, changes deemed insignificantly “deviant” did not even require the permission of the railway company, but could simply be executed and approved by the construction company—which would typically mean the head engineer on a given work site, one whose expertise was typically in *Bahnbau* and not *Hochbau*. This points, in particular, to the authorial agency the stonemasons and woodworkers enjoyed in determining their own best practices and circumscribed aesthetic programs from site to site.

Needless to say, the myriad legal provisions could not anticipate all of the circumstances that would arise from the particular conditions of specific sections of the network, and often the proviso that section engineers had free reign to make stopgap construction decisions was hindered by the actual realities of the labor force, climate, and

political situation. For example, the Turkish government expressly forbade the use of dynamite to blast rock, probably for fear of it falling into the wrong hands and posing a security threat.¹⁰⁹ Instead, the government allowed the use of a far less powerful domestic powder that proved to be ineffective as the rail pushed into the Taurus and Amanus ranges, where a daunting total of fifty tunnels spanning twelve miles needed to be bored through incredibly stubborn paleocene rock.¹¹⁰

By 1910, the Baghdad Railway Company successfully convinced the Ministry of the Interior to lift its embargo on dynamite, and limited amounts were permitted into the country under tight regulations, an exception that greatly reduced the tedium of boring rock bit by bit.¹¹¹ An abundance of rock in one location stood in stark contrast to a more pervasive paucity of rock in others, and the provisions permitting stone cutting from the local environs and quarries were often useless. This was a particular challenge for the acquisition of ballast that needed to be of fine quality and a rather specific size. Often, ballast had to be quarried and collected in locations very remote from their ultimate destination, which often delayed work for long periods of time.¹¹²

¹⁰⁹ Arthur F. Townshend to N. R. O'Connor, Adana, March 23, 1904, NA FO 406/19, 80.

¹¹⁰ McMeekin, *Berlin-Baghdad Express*, 45. Regarding the specific geology of the Taurus Range, see A. S. Alsharhan and A. E. M. Nairn, *Sedimentary Basins and Petroleum Geology of the Middle East* (Amsterdam: Elsevier Science B.V., 2003), especially 55–57.

¹¹¹ Arthur F. Townshend to N. R. O'Connor, Adana, March 23, 1904, NA FO 406/19, 80.

¹¹² Ibid.

5.3.3 Biopolitics and Territorial Practices on the Work Site

The Hejaz Railway posed the particularly stark biopolitical specter of disease. To be sure, disease had consistently crippled or reduced workforces along the Anatolian and Baghdad railways and the railways of Ottoman Europe, yet because of their relative proximity to urban centers and access to some medicine, such diseases as cholera, malaria, typhus, and the “Aleppo button” (the most common diseases) were, while tragic when they struck, kept fairly contained¹¹³ [Fig. 5.7]. Fundamentally different circumstances for the Hejaz workers became apparent in the late spring of 1902, when the influx of pilgrims passing through Transjordan by land brought a particularly ravaging wave of cholera that wiped out almost the entire labor force, sending the few survivors to their hometowns and effectively bringing work to a standstill.¹¹⁴

The Hejaz Railway was also exceptional in other respects. Its tripartite division of labor followed the *Oberbau-Bahnbau-Hochbau* formula, but the nature of the division of work in the final construction stages was more strictly compartmentalized by task, indicating Meißner’s desire to enforce a narrower work regiment for the individual railway workers. One group prepared the earthworks, a second group spread ballast, a third group placed the sleepers on the track bed, and a fourth group laid and attached the

¹¹³ Throughout its gestation, the Baghdad Railway was witness to malaria, typhus, and dysentery, among others diseases. See McMurray, *Distant Ties*, 89–91 for documentation.

¹¹⁴ Nicholson, *Hejaz Railway*, 24. See also Anonymous, “Cholera and the Hedjaz Railway,” *British Medical Journal* 1 no. 2462 (March 7, 1908): 580–81; Birsan Bulmuş, *Plague, Quarantine and Geopolitics in the Ottoman Empire* (Edinburgh: Edinburgh University Press, 2012), 160–74; Michael Christopher Low, “Empire and the Hajj: Pilgrims, Plagues, and Pan-Islam under British Surveillance, 1865–1908,” *International Journal of Middle East Studies* 40, no. 2 (May 2008): 269–90.

rails. Water—beyond that required for human consumption—was needed in massive amounts to mix mortar for masonry. In some instances, centuries-old wells at various Hajj caravanserais were utilized for this purpose, while in others, new wells were built, often themselves requiring considerable engineering.¹¹⁵ Drift sand and sandstorms also posed unique problems that were unseen in the Balkans and Anatolia (although these were later encountered in Mesopotamia, albeit with less frequency).¹¹⁶

While railway stations and collateral structures along the Hejaz Railway tended to be built after the railbed, ballast, sleepers, and track were laid, a very different custom took hold in Anatolia and along the Baghdad Railway. A traveler by the name of George Mounsey described the situation around Adana, where workers feverishly erected “small stones placed to mark the foundations” and “small stone houses” to demarcate the site’s future stations.¹¹⁷ Photos from a number of sites confirm the practice. In some cases the stones houses would eventually serve as residences for workers.¹¹⁸

More common living accommodations for the workers included tent camps and collapsible barracks.¹¹⁹ The annual reports of the Baghdad Railway, for example, detail the purchasing of “equipment” for housing workers. In fiscal year 1910–1911, the railway company purchased an astounding 1,874 tents and 20 prefabricated barracks.

¹¹⁵ Gulsoy, *Hicaz Demiryolu*, 126–40; Nicholson, *Hejaz Railway*, 35–36.

¹¹⁶ Nicholson, *Hejaz Railway*, 36–37.

¹¹⁷ E. C. Donaldson Rawlins to Harry Eyres, Adana, April 27, 1910, NA FO 881/9729; George Mounsey, “Notes on Journey from Eregli to Adana,” report submitted to Gerard Lowther, Pera, May 1910, NA FO 406/35, 120–21.

¹¹⁸ E. C. Donaldson Rawlins to Harry Eyres, Adana, April 27, 1910, NA FO 881/9729.

¹¹⁹ As evinced in society reports as well as numerous photographs. See, in particular, those published in Nicholson, *Hejaz Railroad*.

Tents were designated as one of four types: sick-bay tents, worker tents (each housing 16 individuals), engineers' tents, and foremen's tents.¹²⁰ Photographs show that the tents differed not only in terms of who their residents were but also in form and relative size [Fig. 5.8].

Somewhat forebodingly, the Ottoman Government pressed the Baghdad Railway Company about the comprehensive seismic safety conditions of the railway network only shortly before the disastrous Şarköy-Müreffe earthquake of 1912 (which did not significantly damage the railway network).¹²¹ This prompted the company to commission a study from the leading German geologist and seismologist Fritz Frech (1861–1917), who that same year published his study *Geologisch-technische Beschaffenheit und die Erdbebengefahr des Bagdadbahn-Gebietes bis zum Euphrat* (Geological-Technical Composition and Earthquake Probability of the Baghdad Railway Area to the Euphrates River), the final section of which focuses on ways in which the network's construction—particularly its buildings, tunnels and bridges—could be fortified against the danger of earthquakes.¹²² The centerpiece of his recommendation comprised excerpts of studies by the pioneering Japanese seismologist Fusakichi Omori (1868–1923), who in Frech's estimation revolutionized the knowledge necessary to improve building, bridge, and tunnel construction safety against seismic activity with an extensive study of San Francisco conducted after its disastrous 1906 earthquake. Frech also provided the Baghdad Railway Company with results from Omori's study of the seismic-resistant

¹²⁰ Ba R8119/F8302.

¹²¹ Ibid.

¹²² "Gutachten des Herrn Professor Dr. Frech über die geologisch-technische Beschaffenheit und die Erdbebengefahr des Bagdadbahn-Gebietes bis zum Euphrat," Ba R8119/F8302, 34.

construction of the piers of the Naisha-gawa Railway bridge in Formosa, which Frech held in high regard as the world's safest.¹²³ Frech concluded his report by stating,

For the practical construction of buildings in between earthquake-prone areas near [Bahçe and] Aleppo it will be important to avoid the use of gas for lighting, which is known for its danger, as well as high brick chimneys, the collapse of which can occur from even light impacts. For viaducts and bridge piers, it needs no mention that a pure spring steel construction with a base of reinforced concrete will withstand earthquake shocks better than an existing object made entirely of reinforced concrete.¹²⁴

These stipulations of law and the conditions of life on the worksite influenced the railways' various structures in both their form and urban presence. But these are, for the most part, piecemeal regulations and contingent conditions that make plain the flexibility of their framework, their openness, and their ability to actualize the environmental, political, and technological inconstancies that provide the capacity for formal and ambiguous transmutation.

5.4 Dam, Bridge, and Tunnel: Engineering an Empire

5.4.1 Ashlar, or The Political-Aesthetic Ambition of Infrastructure

¹²³ Ibid., 36. See also Fusakichi Omori, "Note on the Seismic Stability of the Piers of the Naisha-gawa Railway Bridge, Formosa," *Bulletin of the Imperial Earthquake Investigation Committee* 2, no. 2 (October 1908): 169–202.

¹²⁴ "Gutachten des Herrn Professir Dr. Frech," 40. "Für die praktische Bauausführung von Gebäuden in dem erdbebengefährlichen Gebiete zwischen Baghtsché, Aleppo und Katima sei außer auf die Vermeidung von Leuchtgas noch auf die bekannte Gefährlichkeit hoher gemauerter Schornsteine hingewiesen, deren Einsturz schon durch leichtere Stöße bedingt wird. Für Viadukte und Brückenpfeiler bedarf es keines Hinweises, dass die reine federnde Stahlkonstruktion mit einer Basis vom armierten Beton die Erdbebenstöße besser aushalten wird, als ein ganz aus armierten Beton bestehendes Objekt."

Holzmann's engineers had to negotiate the relative advantages and disadvantages of either laying the railway on a meandering course over consistent topographic contours and mild grades or having it sharply penetrate those contours with tunnels and bridges. This required a complex calculus of cost-effectiveness, attempting to keep the railway's overall course as short as possible, minimizing segments of endless turns to allow moving at a decent clip along the railway, and taking advantage of options for orchestrating the construction of a bridge or a tunnel along with the necessary labor and materials at a given site.

Although the bridges and tunnels display significant aesthetic variations for reasons already mentioned, they also share several common traits. The most striking commonality is the recurring employment of semi-rough cubic ashlar masonry layered in a Roman paving pattern. The emphatic repetition of this specific scheme across the network stresses its conceptual importance to the overall project. Although no explicit mention of the material is made by players such as Holzmann GmbH, Meißner, or others, the use of cubic ashlar masonry has well-established cultural as well as ideological precedents. In the early and middle nineteenth century, ashlar stonemasonry (*Werkstein*) had become a central theme amongst freemason groups internationally, particularly in England and Germany, who devoted countless lectures and much ink to the topic.¹²⁵ In a nutshell, ashlar became a potent symbol of a double-edged desire to bring progress to civil society and to acknowledge civil piety by rejecting revolution, a stance positioned inherently against avant garde thinking. Because ashlar was refined and not rusticated, it

¹²⁵ M. S. Abdullah, "Die große Legende vom Tempelbau: Spuren der Freimaurerei in der islamischen Tradition und Legende," *Eleusis* 28, no. 319 (1973); Helmut Reinalter, *Die Freimaurer* (Munich: Beck, 2000).

represented the “perfection” of nature and a counterpredilection for the picturesque that made it a nimble tool for an array of historicist styles while simultaneously maintaining a modern and civic subtext, as driven home by John T. Lawrence’s *Perfect Ashlar and Other Masonic Symbols*.¹²⁶

In Germany, the employment of ashlar had a quasi-nationalist tenor, as it could symbolize a building art that, although born in England, was perfected by the masons of the Holy Roman empire.¹²⁷ This narrative was critical in the decades before and after the unification of the German empire and was exemplified in countless important buildings, bridges, and other monuments built in its early days, from Karl Etzel’s (1812–1865) Bietigheim Enz Valley railway viaduct (1851–1853) to Hugo Licht’s (1841–1923) Neues Rathaus in Leipzig (1899–1905). The light rough-hewn cut of the stone and its Roman-style arrangement articulate two aesthetic objectives: ashlar with a light roughness had proven to take mortar more easily and thus demonstrated its privileging of structural integrity over complete aesthetic streamlining, and the Roman arrangement, harkening the nationalist grandeur implied by the invocation of the greater Holy Roman empire, alludes to a Germano-Mediterranean linkage with tacit cultural suggestions of imperial exchanges and a wider “Mediterraneity.”¹²⁸ What was likely not recognized was the capacity for ashlar construction to harken the dominant form of Ottoman construction

¹²⁶ John T. Lawrence, *Perfect Ashlar and Other Masonic Symbols* (London: A. Lewis, 1912).

¹²⁷ See Georg Klos, *Die Freimaurerei in ihrer wahren Bedeutung aus den alten und ächten Urkunden der Steinmetzen, Masonen und Freimaurer* (Leipzig: Otto Klemm, 1846).

¹²⁸ Regarding ashlar in German stonemasonry, see Allyn Weston, *The Ashlar*, vol. I (Detroit: Free Press, 1855), 195–98. See also Antoine Picon, *L’Invention de l’Ingénieur Moderne: l’École des Ponts et Chaussées (1747–1851)*, Paris: Presses de l’École Nationale des Ponts et Chaussées, 1992; Marcel Prade, *Ponts et viaducs au XIX siècle* (Brissaud: Poitiers, 1987).

since the mid-fifteenth century, at which point the burgeoning imperial power replaced cruder cloisonné with the more efficient, economical and dynamic ashlar construction system which prior to the late nineteenth century had no connection to social and political ideology the way it did in Europe and North America.¹²⁹

5.4.2 The Varda Viaduct

The railway's palette gains its greatest affect through its consistency and its employment in particularly magnificent settings. The single most impressive bridge of the Ottoman rail network is undoubtedly the 564-foot-long, 322-foot-high Varda Viaduct, situated in the Taurus Mountains between the villages of Hacıkırı (Kıralan) and Karaisalı Bucağı¹³⁰ [Fig. 5.9]. The viaduct, which spans the yawning gorge known as Çakit Deresi, was the crown jewel of the projects executed by the Ottoman-Greek section engineer Nicholas Mavrogordato (fl. 1900-1920) (who was fluent in German).¹³¹ Mavrogordato orchestrated a complex effort that entailed lodging workers at the nearby camp of Belededik, which, despite its eight-mile distance from the gorge as the crow flies, would

¹²⁹ As summarized by Sheila Blair, Jonatham Bloom, *The Grove Encyclopedia of Islamic Art and Architecture* vols. 1, II & III (New York: Oxford University Press, 2009), 169

¹³⁰ "Giaour Dere Viaduct," *Engineering News Record* 86 (1921): 420, 423, 425; A. Lütü Balamir, "Varda Köprüsü," *Demiryol* 557 (1972), 19–20.

¹³¹ I suspect that the engineer Johann Lorenz Winkler also played a major role in the bridge's construction, as an experienced engineer also working on the Adana section. See Mehmet Yavuz, *Eine vergleichende Studie über den Bahnbau und die Bahnhofsarchitektur der Anatolischen Bahnen und der Bagdadbahn mit ihren Vorbildern im Deutschen Reich* (PhD diss., Ruhr Universität Bochum, 2005), 38, 118, 161.

involve up to two hours of travel by road.¹³² Heavy materials and equipment—steel, cement, and masonry cutting tools—were shipped to the site by sea from the south rather than from the north by rail via Mersin and then by camel via Tarsus. The construction, which began in 1905, started on both ends and met in the center. This required erecting an auxiliary narrow gauge railway for transporting material for the main bridge from one side of the gorge to the other. A smaller viaduct for this railway was built on a shallower site west of the main viaduct’s planned location, and its piers remain visible today [**Figs. 5.10-5.11**]. By 1907 the main structure was completed, and the railbed was eventually laid, even though the line had not yet fully penetrated the Taurus route because of the tunnel work that remained.¹³³ The viaduct would not go into full service until 1916.¹³⁴

The viaduct comprises three 98-foot-long main arches, whose piers slowly thicken as they attach to the gorge’s bottom. Linking that structure to either side of the gorge are two sets of arch spans, one comprising four arches, each twenty feet in length, and the other with three arches thirty-nine feet in length and one thirty-three feet in length.¹³⁵ Five spandrel arches, rendered contrastingly in flagstone ashlar, connect the voussoirs of the central arch with its adjacent arches, in turn facilitating support for the railway deck above [**Fig. 5.12**]. The imposts reveal the particularity of the bridge’s function: rails protrude from either side as reinforcements, a special touch probably

¹³² This is an approximation based on my own experience driving between the two points and interpolating what would have undoubtedly been the lower quality of the roads as well as the slower vehicles a century ago.

¹³³ “Giaour Dere Viaduct,” *Engineering News Record* 86 (1921): 420, 423, 425.

¹³⁴ Ibid.

¹³⁵ Ibid.

added for want of being able to attain customized steel parts. This is similar, only at a smaller scale, to precedents on the Hejaz Railway and its Palestinian tributaries [Fig. 5.13].¹³⁶ They also reveal the former support for the temporary steel falsework frame that facilitated the construction of both the main and the spandrel arches. The bridge has a curvature with a radius of 3,900 feet that is not always entirely visible when seen in elevation, lending it a sinewy and light touch when encountered in reality.

5.4.3 The Euphrates Railway Bridge

The railway bridge spanning the Euphrates, the network's most significant river crossing, highlights the procedural and formal differences of the bridges that crossed water rather than land. The first recorded suggestion for a bridge spanning the Euphrates can be found in the personal journals of Oppenheim, who identified a point adjacent to Carchemish and Jerablus while traveling the area in 1899¹³⁷ [Figs. 5.14-5.15]. Oppenheim had selected a point on the river where a small island cleft it in two and, whether it is related or not, this is the point that was ultimately chosen.

The Euphrates bridge fell under the auspices of the Baghdad Railway's third section, which was under the direction of head engineer Foellner after 1911. Construction on the half-mile-long bridge began in the summer of 1913.¹³⁸ Foellner calculated the bridge's loads under the same regulations as those used for the Prussian State railways.

¹³⁶ Çelik, *Empire, Architecture, and the City*, 31.

¹³⁷ SOHa Nachlass Max von Oppenheim, Nos. 50–51 (Bands 1–2).

¹³⁸ *Zentrallblatt der Bauverwaltung*, May 26 1915, 274.

Recognizing the advantages of spanning the Euphrates with caged iron deck spans although this was not a specialty of the firm, Philipp Holzmann GmbH awarded a subcontract for the bridge's upper portion to the German-Luxembourgish company Bergwerks- und Hütten-Aktiengesellschaft based in Dortmund, whose parabolic design recalls the bridge at Varda.¹³⁹ Iron pieces were shipped to the site from Bremen via İskenderun.¹⁴⁰ By March 1914, a temporary wooden bridge had been completed, and by April, the ashlar piers were set. By late July, immediately after the outbreak of war, all but one portion of the bridge's iron spans had been completed, but workers were nonetheless forced to leave the work site. The bridge remained incomplete until the Ottoman Ministry of War commanded that it be finished in the winter, reinstating a reduced workforce who would complete the bridge in January 1915.¹⁴¹

The appearance of the 3,400-ton bridge highlights the fact that the railway's masonry imageability was open enough to play a supporting role when the employment of iron was considered more necessary. The iron spans sit elegantly on the piers, yet the overall impression is not one of delicacy, the typical aesthetic goal for bridges constructed of iron. Rather, the bridge conveys a Teutonic sturdiness, with the parabolic iron operating as a sort of light, connective ligament on a muscular spine. Interestingly, T. E. Lawrence cloaked the bridge with a mantle of suspicion even before it was built. He claimed in a 1911 *London Times* article entitled "Vandalism in Upper Syria and Mesopotamia" that the incursion of German archaeologists into the area (referring to Tell

¹³⁹ Ibid.

¹⁴⁰ Ibid., 273.

¹⁴¹ Ibid.

Halaf and Carchemish) had aims of spoliation, noting that the stones of Carchemish were being used to pave the roads to the construction site of the future railway bridge across the Euphrates.¹⁴² Although unsubstantiated and, in actuality, unlikely, Lawrence's claim made plain the larger paranoia that the cotermination of the practices of archaeology and engineering symbolized on a larger geopolitical level.

5.4.4 The Konya Plain Dams and Irrigation Network

The Turkish government sought to piggyback the railway construction activity in Anatolia with a long-discussed effort to rejuvenate the dormant yet fecund land of the great Konya plain, south and southwest of that city.¹⁴³ The plain had once been the larger seabed of the Beyşehir lake and stood uncultivated, despite its great potential, for centuries. Philipp Holzmann GmbH was charged with the project and, under the direction of canalization expert H. Waldorp (fl. 1900–1920), Otto Riese (1850–1939), and Huguenin, began construction in November 1908 on both sides of the Baghdad railway near the village of Çumra.¹⁴⁴ A considerable amount of the construction work was

¹⁴² Axel Heimsoth, “Die Bagdadbahn und die Archäologie,” in *Archäologie und Politik zur Zeit des Kolonialismus (1860-1940)*, ed. Charlotte Trümpler (Essen, Köln: Dumont, 2008), 364.

¹⁴³ Von Oppenheim also noted the potential for the irrigation of the region in 1904, somewhat competitively, it would seem. Max von Oppenheim, “Zur Entwicklung des Bagdadbahngebietes und insbesondere Syriens und Mesopotamiens unter Nutzenanwendung amerikanischer Erfahrungen” (manuscript; Berlin: 1904), also located in SOHa as a loose edition. I would like to thank Gabriele Teichmann, Archivist at Sal. Oppenheim Bank, for discussing this text with me and pointing out its remarkable aspects. Notably, Von Oppenheim compared the potential with what was achieved in the United States (146).

¹⁴⁴ To irrigate the Konya Plain, the Anatolische Eisenbahn Gesellschaft, the Bagdadbahn Gesellschaft, and the Ottoman government established the Gesellschaft für die Bewässerung der Konieebene in 1908. See DBHI Konieebene; Anonymous, *Frankfurter Zeitung*, I. Morgenblatt,

subcontracted out to the İstanbul construction firm Messiers G. et D. Laporte Frères et Co. The primary expectation for the revitalization of the entire area—over 204 square miles and 8.1 billion cubic feet of water—was an increase in wheat production, its distribution benefitting enormously from the proximity to the railway. Given the railway’s kilometric guarantee structure, this would create easy revenue for both German financiers and local businesses.¹⁴⁵ The construction comprised two major dams and pumping stations at Beyşehir, three bridges, and several dozen primary and secondary canals, all of which were completed around 1911 and began running in 1914.¹⁴⁶ As the *Frankfurter Zeitung* proclaimed, the project had brought the neglected land a new life and energy through “German energy, technology and finance.”¹⁴⁷

The irrigation structures of the Konya Plain, by their very nature as earthworks, lack a strong visual identity—the channels of the distribution system are made of concrete and are not visible. The dams, pumping stations, and bridges, on the other hand, further extend the ashlar and iron repertoire evident in the railway bridge. In the main pumping station [Fig. 5.16], a structure surprisingly demure in scale, the retaining wall is punctuated by rounded buttresses that convey the channelization functions. The wall is

April 4, 1914; Anonymous, *Osmanischer Lloyd*, September 7, 1913; Fritz Braun, “Von der anatolischen Riviera,” *Geographische Zeitschrift*, 12, no. 4 (1906), 185–93; August Fitzau, “Geographische Neuigkeiten,” *Geographische Zeitschrift*, 17, no. 1 (1908), 48–53; August Fitzau, “Geographische Neuigkeiten,” *Geographische Zeitschrift*, 14, no. 1 (1911), 585–92; August Fitzau, “Geographische Neuigkeiten,” *Geographische Zeitschrift*, 19, no. 8 (1913), 462–67; R. I. Money, “The Irrigation of the Konia Plain,” *The Geographical Journal* 54, no. 5 (November 1919), 298–303; H. Charles Woods, “The Baghdad Railway and Its Tributaries,” *The Geographical Journal* 50, no. 1 (July 1917), 32–56; Pohl, *Philipp Holzmann*, 107–8.

¹⁴⁵ Pohl, *Philipp Holzmann*, 107–108.

¹⁴⁶ August Fitzau, “Geographische Neuigkeiten,” *Geographische Zeitschrift*, 14, no. 1 (1911), 585–92; Pohl, *Philipp Holzmann*, 107–8.

¹⁴⁷ Anonymous, *Frankfurter Zeitung*, I. Morgenblatt, April 4, 1914.

partly rendered in Roman-style semi-rough ashlar and partly rendered in flagstone ashlar, echoing the mix evident in the upper component of the Varda viaduct. The iron bridges recall in miniature scale the arrangement of the Euphrates bridge. The canalization system spreads from either side of the railway bed, thus strengthening its visual presence in the landscape, and the activation of the system in 1914 produced lush greenscapes on both sides of the railway.¹⁴⁸ Images taken by business agencies traveling through systematically documented the high quality wheats and grains yielded. [Fig. 5.17]

5.4.5 “Ten Arches” Bridge at Amman, Hejaz Culverts, and the Vardar River Bridge

The Hejaz railway contained an impressive array of bridges that were constructed of ashlar, similar to the bridges of the Anatolian and Baghdad Railways. Bridges south of Ma'an were composed of darker stones, reflecting the different geology of the Arabian peninsula.¹⁴⁹ Like the Varda viaduct, the bridges of the upper Hejaz appear to have been modeled roughly after a prototypical viaduct, although they never reached the scale or depth of the Varda. The most aesthetically impressive of these bridges is the “ten arches” bridge in Amman [Fig. 5.18], which comprises a viaduct of ten equal sections, the middle eight being double-tiered with smaller inset arched reinforcements.¹⁵⁰ The feet of the

¹⁴⁸ For an assortment of interesting images of the irrigation facilities, including workers' residences in Çumra (“Tschumra”), see Jürgen Lodemann and Manfred Pohl, *Die Bagdadbahn: Geschichte und Gegenwart einer berühmten Eisenbahnlinie* (Mainz: Hase & Koehler, 1989), 39.

¹⁴⁹ The Transjordan and the Hejaz span a surface of mostly Paleozoic rock, whereas Anatolia and Syria span a mix of Mio-Pliocene and Paleocene rock.

¹⁵⁰ It is possible that the aqueduct is in dialogue with Sinan's aqueduct at Mağlova (1555-1562), outside of İstanbul, which has a similar two-tiered structure and the same amount of bays.

middle seven columns sit on and subdivide a vehicular road beneath the bridge and thicken longitudinally in the bottom eight feet of their height.

Numerous bridges in the desert appear to have been placed at unusually high topographic contours. This was necessary as many of the bridges were built over wadis such as Wadi al Ithil [Fig. 5.19] that had water levels that often grew high in the winter. These bridges became primary targets of the clandestine British forces in Arabia during World War I, and their systematic explosion, such as at Asluj [Fig. 5.20], is well documented.¹⁵¹

Despite the prevalence of ashlar, the use of steel in the network was not unheard of, particularly on the European and Anatolian railways, where the militaristic and maintenance issues faced by the Baghdad and Hejaz Railways had seemed less important. The bridges crossing the Vardar River in Macedonia [Fig. 5.21] and the Sakarya River [Fig. 5.22] in Geyve province are archetypal examples. The Vardar River bridge comprises twelve curved steel-trussed spans resting on ashlar piers, while the Sakarya River bridge comprises a steel box simply resting on piers on either side of the river.

5.4.6 A Taurus Range Tunnel Near Belededik

The tunnels of the Ottoman railway network are most numerous in the Taurus and Amanus regions, in the upper Hejaz, and in Macedonia. While the penetrations of the railway's longest tunnels carry some of its most dramatic stories of patience and risk, the smaller ones tend to be the most architectonically expressive, partly because they often

¹⁵¹ Nicholson, *Hejaz Railway*, 144–61.

required only partial boring through rock and thus demanded a more unique articulation between outside and inside, and consequently retained their legibility as three-dimensional entities.

An excellent example can be found in a small tunnel approximately six miles north of Belededik [Fig. 5.23]. At its northern and southerly entrances the tunnel retains the same horseshoe-shaped arch with minimal keystone shape as almost all of the other tunnels on the network. The entry and exit portals are framed in a rectangular wall approximately two feet thick that protrudes from the rock formation, rearticulating the spatial incision. Within the tunnel, only the westerly edge of the tunnel's penetration pierces rock, leaving the easterly side exposed like a sliced tube piercing out. The protrusion from the rock face is further emphasized by three rounded arches about four feet in diameter that deviate from the horseshoe shape of the entry and exit portals and allow a greater amount of natural light into the tunnel as well as a view out of it. The treatment is as unusual as it is effective in creating a dynamic articulation of the penetration—something not commonly done with tunnels—and expresses the railway's *modus operandi* as one of dominating geology rather than disappearing into it.

5.5 The Station: General Notes

Needless to say, train stations were the most symbolic architectonic devices of the railway's construction, both under the German-Ottoman framework and in general, and their traits on all four subsections under consideration—the railways of Ottoman Europe, the Anatolian railways, the Hejaz Railway, and the Baghdad railway—are an important

component of this study. Considerable aesthetic continuity and discernible evolution can be found among these projects, which constituted approximately ninety percent of the empire's overall railway mileage by 1919. Extending the continuities evident in the network's bridges, tunnels, and waterworks, the architecture of the Ottoman railway network exhibits a fairly consistent aesthetic program that visually articulates several facets of the railway's geopolitical character. This is achieved primarily through the application of a pared-down German vernacular idiom recalling romanticist models of the *Heimatstil* and a consistent material palette, spatial arrangement, and urban situation.¹⁵²

[Fig. 5.24]

The network's stations diverge from the continuity evident in the network's bridges, tunnels, and waterworks in their capacity for and exploitation of subtler modes of cultural signification. In other words, the presumption of the *Heimatstil* is merely the *trans* in the process of transmutation. Mutation occurred on the drawing board as well as at the worksite through the openings facilitated by the previously discussed gaps in the regulation of the construction. The analyses that follow locate those mutations and examine their recorded histories through archival materials, drawings, and firsthand inspection. Synthesizing the written and visual information, we may further understand this network of structures by contemplating their role in bringing imageability to the German-Ottoman union while teasing out its potential complicity in the conflicting

¹⁵² For a discussion of some of the principles and parameters of *Heimatstil* see Elisabeth Crettaz-Stürzel, *Heimatstil: Reformarchitektur in der Schweiz 1896-1914* (Frauenfeld: Huber, 2005), which considers the particular but not dissimilar case in Switzerland. The recreation of traditional Alpine houses for the 1873 International Exhibition in Vienna, in which the Ottoman empire participated, was very well received and represented a high point in the style's popular critical reception along with other historicist styles. The term *Landhaus*, a term championed by the likes of Hermann Muthesius, is often deployed interchangeably with the *Heimatstil*.

geopolitical narratives of penetration, colonization, and development and the ambiguity that stems from the inconclusive nature of that union.

Before doing so, however, it is prudent to note some of the important exceptions to this generic description. The permutations of the *Heimatstil*, and the colonial implications therefrom, did not apply to many of the railway's flagship stations: Damascus, Medina, the stations on either side of the Bosphorus: Sirkeci and the later, extant iteration of Haydarpaşa. Nor did they apply to the stations of the Baghdad Railway completed after 1910 on that railway's second section, which comprises all stations between Durak and Fevzipaşa, among which are the important stations of İskenderun and Adana. For reasons already explained, railway stations between al-Akhdar (the ostensible threshold point for non-Muslims) and Medina also strayed from the model as a result of the climate and materials of Arabia, although less than one might expect in compositional terms. The railways of the Balkans, built under far patchier circumstances, exhibit a greater level of variety yet remain recognizable as a group, with the possible exception of the stations in Bosnia. Railway stations in Rumelia (Plovdiv, Edirne) were recommissioned and handed to the acclaimed architect Mimar Kemalettin Bey, who used them as canvasses in his early development of the famed Turkish "first national style"; they thus belong to a later revisionist trend that will not be directly examined here.¹⁵³

The railway stations that did operate within the *Heimatstil* formula could also be distinguished among themselves. Over the decades, a strict class system that emerged as

¹⁵³ It is not clear why Plovdiv and Edirne, in particular were chosen to be redone. Plovdiv is particularly curious as it had be the time of its commission been recaptured by Bulgaria. Edirne had always been an important city and its significance for a major new railway station likely had something to do with a combination of factors, not least including the presence of the railway school and the city's new symbolic status as the European frontier of the empire.

a key element in the design of the network's stations furnished a discernible repertoire of visual hierarchy. Uninhabited locales, towns, villages, and cities that the railway traversed were, beginning around 1880, designated as first-, second-, or third-class stations (a system explored already through von Pressel) to connote their relative importance and, in turn, their relative size. It is unlikely, but provocative to speculate that this tripartite system may have been in dialogue with similar tripartite hierarchies that developed for the construction of structures that spanned disparate parts of the Ottoman empire in the age of Sinan (c. 1490-1588), including mosques, madrasas and civic structures.¹⁵⁴ This system mutated in a particularly interesting way on the Hejaz railway, which has a notional class system that is tied to religious purpose. Prototypes for the classes of stations were designed as a family of types whose members increased in relative size, grandeur, and decorative splash. The classification system also tended to bear on the railway's campus at large, codifying the amount and/or size of workshops, depots, water towers, gardens, street widths, and allied residences.

The only study of this topic is a dissertation by Mehmet Yavuz entitled *Eine vergleichende Studie über den Bahnbau und die Bahnhofsbaukunst der Anatolischen Bahnen und der Bagdadbahn mit ihren Vorbildern im Deutschen Reich* (A Comparative Study of Railway Construction and Railway Architecture of the Anatolian Railways and their Models from the German Empire).¹⁵⁵ Yavuz's study is earnest yet problematic. First and foremost, Yavuz uses entirely descriptive prose, devoid of any critical analysis, to explicate every railway station on the Anatolian and Baghdad lines. He periodically

¹⁵⁴ As documented Necipoğlu, *Age of Sinan*, particularly in relationship to matters of decorum (71-126).

¹⁵⁵ Yavuz, *Eine vergleichende Studie*.

breaks from the descriptive texts in an attempt to contextualize the railway stations historically, drawing dozens of anachronistic and dubious formal similarities to connect specific buildings with examples in Germany, comparisons typically involving parts as opposed to wholes and evincing a comfort with teleology. Yavuz's greatest accomplishment comes in his appendices, which include impressive investigative work on the biographies of several of the network's engineers and architects as well as collation of original and remade plans, sections, and elevations that have proved extremely useful to this study.¹⁵⁶ Beyond Yavuz's study, the studies by Pohl, Heigl, and Nicholson also have been useful for their generous inclusion of illustrations, particularly historical photographs, that augment and cross-reference this study's archival and site work.¹⁵⁷

Because so many of the Ottoman railway network's stations were prototypes, the analysis that follows is not an exhaustive account of every railway station, nor is every single prototype examined in depth, partly because Yavuz has done this for the Baghdad and Anatolian Railways and partly because it is simply not necessary for this study's objectives. Rather, key prototypes occurring with considerable repetition are examined in order to shed light on the iterative architectural framework they articulate. Special attention is paid to the exceptional structures—non-prototypical stations—where the process of transmutation is most clear. Yet the process also often occurs within and between the prototypes on a subtler register, and this is also explored. Finally, in

¹⁵⁶ At the end of his dissertation, Yavuz published all of the extant drawings of the Anatolian and Baghdad Railway stations held by the TCDD. This was the first time these drawings were published.

¹⁵⁷ Pohl, *Von Stambul nach Bagdad*; Heigl, *Schotter für die Wüste*; Nicholson, *Hejaz Railway*.

considering the entirety of the network constructed in the German-Ottoman framework, these analyses seek to break from the traditional parceling of the railway's architecture into parts and instead form productive comparisons that articulate the architectural differences as much as they do the process of transmutation itself. To accomplish this, the study benefits from a wider consideration of the entire campus of station buildings, not just the station house, as the other buildings often express important distinctions and mutations independent of the more public and symbolic visual message of the station house.

5.6 The Station: The Railways of Ottoman Europe

5.6.1 From Europe to Asia: Codifying a Continental Threshold

German leadership in the construction of the railways of Ottoman Europe is synonymous with Hirsch and Pressel's involvement with the network, which began in 1869 and effectively ended in 1878 with the Congress of Berlin, at which point the newly recognized nations of Serbia, Romania, and Bulgaria became responsible for independently completing the network envisioned in 1868.¹⁵⁸ Much can be gleaned, for example, from Serbia's decision to hire the French entrepreneur Paul Eugène Bontoux

¹⁵⁸ Concerning Bulgaria's involvement, see Theodor Beut, "Baron Hirsch's Railway," *Fortnightly Review* 44, new series (July–December 1888), 229–39. For an excellent study concerning Romania and the complicated machinations of its post-independence railway negotiations with the German empire, see Frederick Kellogg, *The Road to Romanian Independence* (West Lafayette, IN: Purdue University Press, 1995), 68–91, esp. 82–84. Concerning Serbia, see Dragomir Arnaudović, *Histoire des Chemins de Fer Yougoslaves, 1825–1937* (Paris: Dunod, 1937), 38–54.

(1820–1905) to develop its railway, a move that articulated its own formulative nationalist identity and the Russo-Frankish axis that supported it.¹⁵⁹ But here the lines that will be reviewed were those built exclusively with German capital¹⁶⁰ and expertise prior to the Congress of Berlin: San Stefano, in the suburbs of İstanbul, reached Belovo in southwestern Bulgaria via Edirne (Adrianople), Dimitrovgrad, and Plovdiv (Filibe), with a branch to Yambol (Yanbolu); Salonica reached Mitrovica (Mitroviça) via Priština (Priştine) and Skopje (Üsküb / Üsküp); and Dobrljin, at the border with Austria-Hungary, went to Banja Luka (Banya Luka). The architecture of these three lines is rather heterogeneous, with the Salonica-Mitrovica line demonstrating the greatest typological systematization. Records do not consistently document the architects or construction dynamics of all of the stations in depth, so a formal analysis is particularly important. Although the architecture of these three disconnected networks is generally relatively demure, the implications for the cities in which they touched down and the general character of the regions around them is considerable.

5.6.2 Dobrljin to Banja Luka, İstanbul to Belovo

While the station in Dobrljin, completed in 1873, comprises a simple array of one- and two-story buildings [Fig. 5.25], the Banja Luka station [Fig. 5.26], also

¹⁵⁹ Grunwald, *Türkenhirsch*, 56.

¹⁶⁰ Hirsch was, nonetheless, a bona fide man of Europe with investment and commercial connections across the continent, most considerably in Paris but also in Belgium, England, and Switzerland. He drew significantly on the latter for financial support of the railways.

completed in 1873, demonstrates considerably more architectural ambition.¹⁶¹ The Banja Luka station comprises a long one-story unit that adjoins two two-story units whose upper levels were used for apartments and possibly offices. The central unit is slightly higher and broader and functions as the main hall, with three main portals to the city side and a large covered waiting area on the track side.

The stations of the İstanbul-Belovo line develop a typological order overall while retaining some singular designs. The stations at Edirne [Fig. 5.27] and Filibe [Fig. 5.28], both completed c. 1873, are simple two-story structures that appear to be nearly identical to the termini at Skopje and Thessaloniki. Each comprises a main building with a larger central unit and two long side units whose pitched roofs cross perpendicularly in the middle.¹⁶² An extant service building at Belovo [Fig. 5.29], also completed c. 1873, has its upper portion clad with the wooden siding common to the Salonica-Mitrovica railway. The station at Skobeleva (1873) [Fig. 5.30], is noteworthy for its use of two stories and bears some similarities to Anatolian Railway stations that would be built fifteen years later.

¹⁶¹ The station was also affiliated with a spate of new industrial activities, including sawmilling, weaving, and brewing.

¹⁶² Several concerns were raised concerning the expansion of stations only a few decades after completion, which by 1909 were already outmoded. See “Forderungen des Personals to Verwaltungsrat der Orientalischen Eisenbahnen,” Vienna, April 16, 1909, Ba 8119F/8003: “Eine besondere Verbeßerung und Vergrößerung der vorhandenen Personalkasernen wäre für folgende Stationen in Betracht zu ziehen: Stefano, Kutschuk-Tschekmedsche [sic], Tscherkessköi [sic], Andrianopel [sic] und Sibeftsche [sic]. Stefano wird in dem in Ausarbeitung befindlichen Projekte für das zweite Geleise [sic (Gleise)] auf der der Stadtstrecke behandelt werden. In den übrigen vorgenannten Stationen müssten Neubauten aufgeführt werden, da eine Adaptierung der alten Lokalitäten im gewünschten Sinne nicht erzielbar ist.” Kemaleddin Bey would redo these stations in 1908.

5.6.3 Salonica to Mitrovica, Salonica to Monastir

Two photographic albums of sites along the Salonica-Mitrovica Railway (completed in 1873) and the Salonica-Monastir Railway (completed in 1894) in the archive of Mackensen, known primarily for his later work on the eastern section of the Baghdad Railway, strongly suggest that he collaborated with Pressel on the railways' construction and may have been in charge of their designs.¹⁶³ The station at Skopje (1873) [Fig. 5.31] appears to be of a similar order to the Thessaloniki station (c. 1872), sharing its faux pediment but without the smaller adjunct spaces on either end of the structure. A consistent ordering system emerges in the stations between Mitrovica, Priština, and Skopje. The stations of the Monastir line at Agoustos (Naousa) [Fig. 5.32], Guida-Kapsohora (Alexandreia) [Fig. 5.33], and Karaferia (Veroia) [Fig. 5.34], all completed in 1873, are identical, comprising a two-story structure with a pitched roof, two chimneys, and an adjunct one-story loading dock and warehouse. The station at Monastir (Bitola), completed two decades later in 1894, is similar in its volumetric layout but lacks the shutters and rustication of the other stations. Stations that are apparently of a third order can be seen at Ekchisou (1872, Exi Su) [Fig. 5.35], Vertekop (1872, Skydra) [Fig. 5.36], and Ostrovo (1872, Arnissa) [Fig. 5.37], all having a similar proportional system in a single one-story main building with a longitudinal wing connecting to a smaller latitudinal wing. Brick chimneys and picket fences are evident on and adjacent to all of the structures. Consul General C.E. Blunt describes them in an intelligence report as follows:

¹⁶³ Mackensen's numerous files, including sketchbooks, photo albums, and ephemera, are well preserved. See NLa Nachlass Ernst Mackensen.

All of the... stations are lightly built of wood and bricks on stone foundations, and although small and plain in appearance, afford sufficient accommodation for the present traffic of the line... The Salonica station is of course on a much larger and better footing than the rest. It contains offices and residences for the manager and engineers of the line, and the necessary warehouses for the traffic, besides sheds for engines and boilers, and repairing shops supplied with planning and other machines. But all these buildings and accessories will have to be considerably enlarged and rearranged as soon as the junction of this line with the Servain [sic] Railway is accomplished, in order to accommodate the increase of traffic resulting therefrom.¹⁶⁴

Hirsch's railway syndicate, the Compagnie de Chemins de Fer Orientaux, sought some construction assistance for the Salonica-Mitrovica line from the engineering firm Henri Bariola & Cie, also of Milan.¹⁶⁵ In 1875, the Italian consulate at Salonica commissioned an independent appraisal of the line by a team of engineers from the Politecnico di Milano (Polytechnic University of Milan) who had worked in conjunction with Bariola on the railway's construction, completed two years prior. The report does not explain the reason for the appraisal, but two possibilities seem plausible: either the Italians were appraising the quality of the railway for their own knowledge, or the Ottoman government had engaged them for the study for their own third-party appraisal of its quality and perhaps the likelihood of further German cooperation (this supposition is supported by the fact that the report is written in French). Regardless, the Italian report reveals a great deal about the line's eighteen stations and their placement:

¹⁶⁴ Report by Consul General J. E. Blunt, Salonica, November 2, 1883, NA FO 881/4941.

¹⁶⁵ "Rapport de la Commission Italienne, nommée sur a demande du tribunal consulaire Italien de Salonique par le Collège des Ingénieurs de Milan à 'leffet de verifier l'état du Chemin de Fer de Salonique à Mitrovitza exécut par l'Enterprise Henri Bariola & Cie por le compte de la Société Impériale des Chemins de Fer de la Turquie d'Europe" (Milan: Imprimerie Joseph Civelli, 1875), located in Ba R901/15059. See also Henri Bariola and Paul de Hees, *Chemins de fer de Thessalie: Rapports* (Constantinople: typo-lithographie du journal "La Turquie", 1883). An announcement in the *Jewish Messenger* indicates that Bariola also served as the stationmaster at Salonica, and that Hirsch's investment in the railways coincided with his philanthropic construction of schools in the city. See Anonymous, "Notes from Turkey," *The Jewish Messenger*, May 16, 1890, 4.

We do not find that the stations were spaced with the unparalleled parsimony of those in Europe. There can be no absolute rule for determining the number of stations in a row. It is based on the extent and nature of the traffic, it is according to the situation and the importance of population centers and not from preconceived and unchanging principles that need be established.

As for the location of the stations, most are located in little remote villages. During our visit we noted with satisfaction that in the care of the Ottoman Government [there has been] a great [amount of] activity to build roads to connect the station to the neighboring villages. It is not uncommon for a single station... to serve several villages and in this case, we have sought to establish them roughly equidistant from these villages...

The buildings are extensive and convenient for travelers and made of well-built masonry or wood and brick (like Belgian and Swiss stations) and they contain the necessary operating facilities for employees.

The stations at Salonika [sic], Keupruly [sic] and Üsküb are even more spacious than the standard types.

... these structures were built by the Enterprise H. Bariola and Co. under special agreements made with the Imperial Society building because they were not included in its fixed-price contracts.¹⁶⁶

The report contains several useful pieces of information. First, it indicates an urban strategy based on known population figures for cities and villages and thus their perceived importance. Second, it reveals that local authorities began additional infrastructure projects in tandem with the locating of the railway stations. Third, the report gives the first and clearest indication known to date of the architectural model from

¹⁶⁶ “Nous ne trouvons pas que les stations ont été espacées avec une parcimonie sans exemple en Europe. Il ne peut y avoir aucune règle absolue pour déterminer le nombre des stations d’une ligne. C’est d’après l’importance et la nature du trafic, c’est d’après la situation et l’importance des centres habités et non d’après des principes préconçus et invariables qu’il doit être établi... Quant à l’emplacement des stations, la plupart ne sont guère éloignées des villages qu’elles desservent. Au moment de notre visite nous avons constaté avec satisfaction que, par les soins du Gouvernement Ottoman, on travaillait avec une grande activité à construire les routes qui doivent relier les gares aux villages voisins. Il n’est pas rare qu’une seule station soit destinée à desservir plusieurs villages et, dans ce cas, on a cherché à les établir à peu près à égale distance de ces villages... Les bâtiments des voyageurs sont vastes et commodes, bien bâtis en maçonnerie, ou en bois et en brique (comme les stations belges et suisses) et ils contiennent les logements nécessaires pour les employés de l’exploitation... Ceux des stations de Salonique, Keupruly, et Üsküb sont même plus spacieux que ne le commandaient les types approuvés... ces ouvrages ont été construits par l’Enterprise H. Bariola et Cie en vertu d’accords spéciaux pris avec la Société Impériale de construction, car ils n’étaient pas compris dans ses contrats à forfait.”

which the stations were fashioned, claiming them to be akin to Belgian and Swiss stations—although the Swiss model seems far more accurate. Fourth, the report indicates that these stations were considered exceptions to a standard system, rather than the other way around, where small stations were considered exceptional between the flagship stations—which reveals a logic that emphasizes the ceremonial capacity of the building to represent the line through architecture alone, and not merely organizational rigidity. Finally, the report reveals that morphologies apparently had much to do with the fact that the costs for these stations were not fixed, as they were for the smaller stations, again underscoring their exceptional qualities as well as the negotiations that would have had to occur between Hirsch, Bariola, von Pressel, and the Ministry of the Interior to determine what would be architecturally sufficient for each locale.

5.6.4 Sirkeci

Sirkeci station (1890), the terminus for the railways after the 1890 extension from San Stefano, held immense symbolic importance and was one of the most important buildings constructed in İstanbul at the end of the nineteenth century. The project was conferred to August Jachmund, the German-born architect and esteemed professor at İstanbul Technical University. The station is sited about one hundred meters from the southern shore of the Golden Horn, northwest of the Seraglio Point. The main façade and plaza are on the site's northern edge, with the track side occupying its southern edge. The composition comprises a larger central volume with wings on either side, both terminating with two larger ends that cap the longitudinal composition [Fig. 5.38].

The central volume comprises a main entryway with double doors with a large circular stained-glass window in a rosette style above [Fig. 5.39]. On either side is a tripartite vertical bay of windows, the bottom a pair with simple rounded arches that have decorative detailing at their apexes, and the middle and upper sets comprising three smaller windows—the middle slightly larger than those on the sides—with muqarnas and arch articulations, respectively. The imperial *tuğra* sits above the circular window on the cornice line, and the entire volume is capped with a mansard-style roof, likely of bronze plate. At its corners, the volume has small tower-like forms with small gold and cerulean clocks on their two outward sides. Bulbous arches appear, as do cusped and ogee arches [Fig. 5.40]. Historical photographs also reveal the existence of extended onion domes on either tower, not dissimilar to those found at the Taksim Halil Paşa Topçu Kışlası (Taksim Military Barracks), built by the Armenian court architect Krikor Balyan (1764-1831) in 1806.¹⁶⁷

The siding of the building has a distinct striping repertoire. Pink and black stripes above the main entry and surrounding the round windows appear to be painted on, perhaps mimicking a Mamluk idiom [Fig. 5.41]. A striping scheme with bands of tiny bricks and a slightly narrower band of concrete appears along the entire lower half of the frontal and side elevations. Each long wing has eight bays, two functioning as additional entrances to various interior spaces, including waiting rooms, the restaurant, and the ticketing office. The window bays are a pair of arched windows separated by a slender

¹⁶⁷ The best sources for both Krikor Balyan and the Balyan family are Hasan Kuruyazıcı, *Batılılaşan İstanbul'un Ermeni Mimarları* (İstanbul: Uluslararası Hrant Dink Vakfı, 2011); Pars Tuğlacı, *Osmanlı Mimarlığında Batılılaşma Dönemi ve Balyan Ailesi* (İstanbul: İnkılâp ve Aka, 1981).

column with a *crystalisée*¹⁶⁸ capital, while the simple beveled articulation of the doorways is enhanced by an upper green, red, and dark blue stained-glass segment. The bays rise to subtle pointed arches embellished with orientalizing details and contain large rounded windows in their upper section, some of which open and some covered with ornate grills. [Figs. 5.42-5.44] Spans subdivide each circular window into eighths, while two overlaid squares rotated by forty-five degrees articulate the eight points of the window's division in its central portions. The brick and concrete striping ends at the lower line of the large window, and above there is a simple stucco surface rendered in pink, which may or may not have been the original color. The larger end volumes redouble these motifs with slightly larger windows of three bays and an upper level with beveled windows. The *tuğra* and date of construction are inscribed into the far ends of the building, while the cornice line, a pattern of rhythmic waves of arabesques, connects the composition of the side volumes and the central one.

Inside, delicate qualities reign. The main hall, the grandest space, comprises a large and airy cubic central area organized around an implicit nine-square grid [Fig. 5.45]. An upper band of triplets of arches inlaid with stained glass connects to the exterior motifs, while a series of pink and white wooden ribs meeting at a perforated square top evoke a light, layered composition. The roof structure, reinforced by thin exposed rebar, is supported by extremely thin fluted cast-iron columns also with

¹⁶⁸ I refer here to the “fourth order” of columnar orders argued to be distinctly Ottoman in Marie de Launay, Pietro Montani, et al., *Usûl-i Mi‘mārî-i ‘Osmânî / L 'architecture Ottomane / Die ottomanische Baukunst* (Istanbul, 1873). The text, exhibited and circulated at the Great Exhibition in Vienna, was a seminal introduction to Ottoman architecture to European audiences. It would ultimately be decried by the architects of the First National architects and historians alike, but in the interim has an important impact. See Necipoğlu, “Creation of a National Genius” which includes reproductions of the plates and a complete historiographic treatment.

muqarnas capitals, hinting at the simultaneity of a modern structural system with orientalizing detailing also evident in the interior of the station's restaurant and wall details. [Figs. 5.46-5.47] On clear days the main hall receives a considerable amount of light, while the other spaces of the wings retain a rather cloistered Victorian feel. The track side, with a long metal overhang attached along the building's longitudinal span, mostly echoes the opposite façade [Fig. 5.48].

Jachmund's composition makes liberal use of Islamic motifs, including the Mamluk, Moorish, and pointed arches, the interpretations of Arabic geometric ornament in the stained-glass windows, the Mamluk- as well as Ottoman-style striping, and several other smaller ornamental details whose pedigree, as was common with the Orientalist genre, is not readily discernible. The treatment of bricks and the dynamic layering of thin sheets of wood in the interior are perhaps the composition's most original elements. This is, in many ways, a quintessential work of orientalist architecture, orientalized for rather clear reasons. Sirkeci was, after all, the new terminus of the Orient Express and the symbolic "gateway to the Orient."¹⁶⁹ Regardless of what it symbolized, Sirkeci marked a real and significant addition to the city's landscape and was the first major architectural effort in the design of Ottoman railway stations to consider the station building as a site

¹⁶⁹ Where the "Orient" begins and ends was, of course, not a foregone conclusion. As evident from the very name of the railways in the Ottoman Empire, the Balkans were considered "Oriental," particularly by the Austrians who seemed to employ the term to distinguish Austria, as the Empire's center, from the dependent and the satellite states in southeastern Europe. This metageographical question was taken up by Klemens von Metternich (1773–1859), first State Chancellor of the Austrian empire, who famously noted in 1814 that the Orient began at the "Rennweg," a street directly to the east of Vienna, suggesting Austria's disinterest in the affairs and culture of the Balkan peninsula (see Victor S. Mamatey, *Rise of the Habsburg Empire, 1526-1815* [New York: Krieger, 1978], 158). However, by the last two decades of the nineteenth century the definition of Europe was generally more agreed upon, and the threshold of the "Orient" was commonly placed in the predominantly Muslim lands of the Ottoman empire at Istanbul, symbolically poised and commonly understood in both Asia and Europe as the point of entry to true Oriental culture, something Jachmund's station certainly attempted to signify.

for a significant formal, even emotive, synthesis with a strong public presence and civic import.¹⁷⁰

As Turgut Saner has demonstrated, the symbolic importance of Sirkeci developed primarily as the terminus welcoming European travelers to the “Orient.” The railways, and hence the station, were more commonly used by elites and foreigners than they were the general populace. Effectively, Jachmund’s orientalizing of the building was, Saner argues, born of a desire to treat the scenic location scenographically:

...on the European side of İstanbul, Sirkeci Station at the [end of the] European railway network is of particular importance. Westerners at this point set foot in the “East.” Jasmund [sic] did not know much about Ottoman architecture, and their expectation of their first time in the “exotic East” demanded an Eastern design loaded with connotations. From this perspective, Sirkeci Train Station’s Orientalist forms are meant to bear the iconic structure.¹⁷¹

He also notes:

Sirkeci train station was to be a structure containing space and time and to be used with new construction methods and the unbound eclectic forms outside of Western architecture reflects the weight placed on Islam. Ottoman and non-Ottoman architecture and decoration items are used together by [the process of] mixing. The architect’s image is cacophonous, created in a spirit well-suited to the exotic, maybe [also] as a stylistic invention.¹⁷²

¹⁷⁰ An encyclopedic entry about the building is Yıldız Salman, “Sirkeci Garı,” in *Dünden Bugüne İstanbul Ansiklopedisi*, vol. 4 (İstanbul: Kültür Bakanlığı ve Tarih Vakfı, 1994), 13.

¹⁷¹ Surtut Taner, *19. Yüzyıl İstanbul Mimarlığında “Oryantalizm”* (İstanbul: Pera Turizm ve Ticaret A.Ş., 1998, 1998), 86-7. “Ancak İstanbul’un Avrupa yakasındaki Sirkeci Garı, Avrupa demiryolu ağının son noktası olarak özel bir önem taşır. Batılılar bu noktada “Doğu’ya ayak basarlar. Jasmund da Osmanlı mimarlığını iyi tanımadığı için değil, ziyaretçiye ilk anda beklediği “egzotik Doğu” imgesini vermek üzere Doğulu çağrışımlarla yüklü bir tasarım ortaya koymuş olmalıdır. Bu açıdan Sirkeci Garı oryantalist biçimlerinin ötesinde anlam taşıyan bir simge-yapıdır.”

¹⁷² Ibid., 86. “Sirkeci Garı, bir gar yapısının mekan gereklerini içermesi ve dönemi için yeni yapı yöntemlerinin kullanılmış olması dışında Batı mimarlığı biçimleri ile ilişkisiz İslam ağırlıklı bir eklektisizmi yansıtmaktadır. Osmanlı ve Osmanlı dışı mimari özellikler ve dekorasyon öğeleri karıştırılarak bir arada kullanılmıştır. Bu kalabalık ve yüklü görüntüye mimarın, yarattığı egzotik espirye yakıştırdığı, belki kendi buluşu olan stilizasyon ve kompozisyonları da eklemek gerekir.”

Such scenography was not without its internal complexity and contradictions. Orientalist architecture was a distinctly European product at this point in time and, as such, its German author, Jachmund, was merely exporting the style as a professional working abroad. The orientalist architectural idioms developed in Europe, primarily for synagogues prior to the construction of Sirkeci, drew largely on Moorish idioms with its distinct cusped arches and wide chromatic spectrum, popularized by Owen Jones. The little that was known about “classical” Ottoman architecture—it’s emphasis on mass and structure, its extensive use of monochromatic and storied (and some dismissed as derivative) dialogue with Byzantine architecture—did not easily lend itself to the decorative, colorful and primarily optical qualities that the Moorish references had afforded the style in Europe.¹⁷³

On the Ottoman side, the style, imposed from Europe as an image that was supposed to speak to Islamic identity but, in actuality, had little resonance with Ottoman culture, Sirkeci symbolized an existential debate which Taner has summarized as follows:

The orientalist style brought along some special problems to Ottoman architecture. Foremost among them is its relation to the revival of early and classical Ottoman architecture during the nineteenth century. Also, the process of westernization that the Ottoman capital was undergoing at the time caused reactionary responses to orientalist examples which were considered as deficient specimens of architecture. Instrumental to such reactions was the claim that the Ottoman Empire should be represented by pavillions in ‘national style’ at international exhibitions of the period. Consequently, Ottoman architecture faced its own past starting with the mid-nineteenth century. The aim was to create an original style with the help of the formal language of the past without falling back on imitation. To a certain extent, the analysis of Ottoman Orientalism unravels the dynamics of this search for a new style.¹⁷⁴

¹⁷³ See a discussion of this in Saner, “*Oryantalizm*,” 154-58.

¹⁷⁴ Ibid., 157. The origins of this internal dialogue within the empire is documented in Ahmet Ersoy, “On the sources of the ‘Ottoman Renaissance:’ Architectural Revival and its Discourse During the Abdülaziz Era (1861-1876)” (PhD diss., Harvard University, 2000).

Sirkeci, more than any other work of architecture, brought the fissure between Islam and burgeoning nationalism to the fore. As much as it symbolized the empire's modernization, it also symbolized the tyranny of European image-making which Abdülhamid and the Young Turks alike would seek to resist. This suggests, provocatively, that in the decades that followed the German railway personnel and architects would play as much a role in the provocation of these debates within Ottoman architectural culture as they would be an integral part of its antidote and revisionist ambition.

5.7 The Station: The Anatolian Railways

5.7.1 To the Heart of the Empire and the Heart of the Matter

The commonly used name for the lines extending eastward from İstanbul, the “Anatolian Railways,” implies a network formed under a cohesive administration and construction program. This was not the case. The “Anatolian Railways” are actually a conglomerate of six distinct lines that were not necessarily built in concert: the major lines of İstanbul-İzmit, İzmit-Eskişehir, Eskişehir-Ankara, and Eskişehir-Konya and the smaller branch lines to Adapazarı and Kütahya. As mentioned earlier, the İstanbul-İzmit line has a very different history than the others, as it was initiated, surveyed, and built under the auspices of the Ottoman Ministry of the Interior, specifically, Major Ali Bey

and the engineer Müg(j)el.¹⁷⁵ Pressel studied at least part of the line, around the Asian terminus¹⁷⁶ and the Ministry of the Interior subcontracted an English consortium to complete the design and construction of stations and collateral buildings.¹⁷⁷ The other five lines were built under the auspices of the German-led Société du Chemin de Fer d'Anatolie and constructed by Philipp Holzmann GmbH between 1888 and 1896.

5.7.2 Haydarpaşa to İzmit

The İzmit station demonstrates a defined and repetitive aesthetic program that the Haydarpaşa station does not. This is partly because many of this line's fifteen stations needed to be rebuilt after being ravaged by an earthquake on July 10, 1894,¹⁷⁸ and this was done when the Germans took over the British-built line together with the extensions further into Anatolia from İzmit. The British-designed buildings were made of half-timber and plastered adobe brick, and extant images of the old terminus at Haydarpaşa [Figs. 5.49-5.50] reveal the simple architectural style. The straightforward articulation of the station stands in contrast to a orientalist kiosk used as a passport office and seen in some images with an onion dome and in others without. [Fig. 5.51] The appearance of

¹⁷⁵ Sait Toydemir, "İzmit-Adapazarı Hattının İşletmeye Açılması," *Demiryollar Dergisi* 291-93 (1950), 74.

¹⁷⁶ See DM NL Wilhelm von Pressel (13 I, II).

¹⁷⁷ *Archiv für Eisenbahnwesen*, vol. 37 (Berlin, 1914), 781; Yavuz, *Eine vergleichende Studie*, 65.

¹⁷⁸ This was known as the "Gulf of İzmit" and "Marmara Sea" earthquake. C. F. Finkel and N. N. Ambraseys, "The Marmara Sea Earthquake of 10 July 1894 and its Effect on Historic Buildings," *Anatolia Moderna: Yeni Anadolu* 7 (1997): 49-58; Ayşe Nasır, "Türk Minalığında Yabancı Mimarlar Üzerine Bir Deneme" (PhD diss., İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, İstanbul, 1991), 82, 84; Yavuz, *Eine vergleichende Studie*, 42.

the old station at Göztepe (1872) [Figs. 5.52–5.53] evokes a quaint Victorian cottage. The newer stations at Göztepe (c. 1883) and Kızıltoprak (c. 1873) [Figs. 5.54–5.56] illustrate early attempts by the German engineers to reconcile the primness and mannerism of the British designs with a greater solidity.

At the other end of the spectrum of scale is the demure and peculiar design for the original station at Fenerbahçe, about which little is known. [Fig. 5.57] The station comprises a tiny wooden box circumscribed by a veranda. The design at Göztepe, where the new station was built somewhat surrealistically on a platform suspended over a deepened portion of track, resembles a provincial French Second empire civic structure. At Kızıltoprak, channeled rustications with glaciated quoins thickly frame doors and window portals, while a saddled and gabled roof retains the lightness and finial elements of the British designs at Göztepe. The Kızıltoprak station is perhaps the most instructive, with its transitional posture between Victorian and Germanic motifs expressing, perhaps, how the Holzmann *Heimatstil* prototype evolved syncretically, not as a preordained German copy.¹⁷⁹ Important adaptations also appear in the plan, with the spatial hierarchies between first-, second-, and third-class waiting rooms and the *haremlik* more clearly defined through their relative sizes and their flanking of a central hall, which at Kızıltoprak houses not the shared ticket office or canteen but rather the third-class waiting room.

The German spatial and visual repertoire comes into its own at İzmit, likely due to the changed status of this station, which served as a railhead with active port facilities [Fig. 5.58] and a strong urban presence [Fig. 5.59]. Whereas the British-built İzmit

¹⁷⁹ Yavuz argues that the stations were simple appropriations of standard German building types throughout his study, without factoring in the stylistic regime of *Heimatstil*.

station [Fig. 5.60], completed c. 1874, was a parallel bookend to Haydarpaşa in both scale and, partially, visual impression, the German-built station of 1888 [Fig. 5.61]—which is adjacent to the old station and thus makes the comparison obvious—downplays the bourgeois ceremonial of the older terminus in favor of a romantic *völkisch* realism. The juxtaposition presages the potent stakes of the British-German debates on vernacularism and national style later popularized by Hermann Muthesius.¹⁸⁰ Yet it also reconciles the utility of the spatial with the stylistic hierarchy, expressing İzmit's continued importance as both a port city and the most important industrial hub within a day's reach from the capital. Here the rustication of portals expands to building corners and is executed with greater, if brutish, elegance and systemization—appearing not just in the stations but also in the workshops, watch houses, sentry stations, and domiciles.

5.7.3 İzmit to Ankara and Konya via Eskişehir

While still not entirely consistent, the clarity of the German organizational system becomes more evident beyond İzmit, where stations and their facilities are articulated through a four-tier class system as per the concession. Class One stations included Eskişehir, Ankara, and Konya. Class Two stations included Adapazarı, Afyonkarahisar, Akşehir, Alayunt, Bilecik, Kütahya, and Polatlı. All other stations were either Class Three or Class Four, depending on their relative populations, with minor differences between them. In principal, buildings within each class were meant to be the same, but variations were both subtle and common.

¹⁸⁰ See Hans-Joachim Hubrich, *Herrmann Muthesius: Die Schriften zu Architektur, Kunstgewerbe, Industrie in der Neuen Bewegung* (Berlin: Mann, 1981).

Otto Kapp von Gülstein directed the construction of the line to Ankara between 1889 and 1892. In addition to engineers overseeing the line's main divisions, most of the smaller cities had an *Abteilungsbaumeister* (division building master). The names of these men¹⁸¹—Hazelaire in Sapanca, de Violini in Gebze, Koptschinsky in Lefke, Pouillaude in Bilecik, von Gerson in Bozüyük, Maggia in Eskişehir, Martin in Kapıkaya, Meißner in Köplü, Müller in Balaban, and Konschil in Akpınar—indicate the multinational mix of the construction program and some of the names behind subtle transmutations. By December 1889, all of Kapp von Gülstein's signed plans for the stations and their campuses had been submitted to the Ministry and approved.¹⁸² Mackensen directed construction of the line from Eskişehir to Konya between 1893 and 1896, immediately after the completion of the railway to Ankara. While Mackensen inherited a great number of Kapp von Gülstein's workers, he also proactively sought to Germanize the workforce, recruiting a number of upper-level engineers from Germany to join the construction to Konya: head engineer Ossent, building inspector Heeser, construction directors Roths Schuh and Habisch, architect Kawerau, and engineer Winkler (first names unknown).¹⁸³ By June 1894, Mackensen had submitted all architectural plans to the Ministry of the Interior, where they were swiftly approved. Although Mackensen largely followed Kapp von Gülstein's architectural scheme, he made a few notable alterations, including elimination of the fourth-class typology and the decorative finial

¹⁸¹ Philipp Forchheimer, *Die Eisenbahn von Ismid nach Angora* (Berlin: W. Ernst & Sohn, 1891), 33–34.

¹⁸² Yavuz, *Eine vergleichende Studie*, 87.

¹⁸³ Anonymous, "Bahnbau Eskişehir-Konya," in *Konstantinopler Handelsblatt* 1, No. I (1896): 19–20.

and raising ceiling levels by about one-half meter, which gave the buildings under his direction a somewhat statelier appearance.

The Class Four stations, such as those as Alpi (1892) and Beylikköprü (1892) [Fig. 5.62], are extremely simple, comprising an extended and compartmentalized plan with slightly higher portions on one end. The opposite end contains a storage area, a small office, and a small police station. A single waiting room and the ticket station are in the center. As in the second- and third-class stations, the long extension provides direct access to the trains through a platform. The Class Three stations retain a largely similar formula on both Kapp von Gülstein's and Mackensen's lines, such as those at Sabuncupınar (1892) and Bozüyük (1892), respectively. Both types reinstate the class and *haremlik* divisions on the ground-level plan. The only discernible differences are Kapp von Gülstein's use of slightly rounded fenestration [Fig. 5.63] in contradistinction to Mackensen's rectangular composition [Fig. 5.64].

Organizational differences between Kapp von Gülstein's and Mackensen's designs are most evident within the Class Two station typology, and a comparison of the most well-documented examples—Adapazarı (1890, Kapp von Gülstein), Bilecik (1893, Kapp von Gülstein), and Afyonkarahisar (1895, Mackensen)—is instructive. All Class Two stations comprise a simple large main structure with a side wing, and in all three examples, the structure takes on the presumptive appearance of the *Heimatstil* by virtue of its proportions, reinforced by the narrow exterior band articulating the division between the ground and upper levels. But they differ significantly in the rendering of the side wing. In Afyonkarahisar, workshops and storage facilities were erected as freestanding entities separate from the station building, whereas in Adapazarı and Bilecik

they are integrated with the main structure as a long one-story extension with a serviceable platform to the track and generously proportioned freight doors. The small wing in Afyonkarahisar functions as the administrative area, freeing the entire main unit to function exclusively as a waiting space [Fig. 5.65]. This is evident in a unique plan [Fig. 5.66] in which the waiting rooms for the first- and second-class passengers are not directly connected through a main hall to the third-class passenger room, but rather proceed directly through the building longitudinally from street side to track side. Even more unusual, the *haremlik* is completely absent. This stands in contrast to Adapazarı, where the plan resembles more a shrunken version of the Class One plan, with its central hall and adjacent spaces on the left and right for the various classes of passengers, rather tiny waiting rooms that mark the presence of the *haremlik*.

One of the most significant and fascinating developments on this line is the introduction of timid yet distinct pointed arches in the windows of some of the residences on second-class station campuses, such as in Bilecik [Fig. 5.67]. Whereas the buildings with technical and storage functions are rendered with the same rounded, rusticated arches as the main station building, the subtle pointed arch articulation of the window frames in the residential structures marks the first outwardly Islamicizing reference of the railway network's architecture, the motivations for which are not documented.

The Class One stations of Eskişehir (1891) and Ankara (1892) are identical [Figs. 5.68-5.69], consisting of a central block with two wings, three stories each, sitting on a 4,200-square-foot footprint.¹⁸⁴ Awnings cover exterior trackside waiting areas on the side of one wing. The plan reveals a further evolution to a division of classes and of men and

¹⁸⁴ Yavuz, *Eine vergleichende Studie*, 103.

women along the central section, which is punctuated with three doorways or windows that line up on both the city and track sides, creating the building's airy central hall. Unlike earlier models, the central hall no longer doubles as a waiting room but has only one devoted programmatic function as the ticketing office. To the left are the first- and second-class waiting areas, while the third-class and women's waiting rooms are to the right, all having direct access to the track side. A small store and the luggage room are off the main hall, while administrative offices are contained on the far ends of both track sides as well as on the second and third levels. This plan was the clearest articulation of programmatic hierarchies to date and remained the general model in the following decades for the organization of the plans.

As in Ottoman Europe, city names are inscribed on both latitudinal elevations in Latin and Ottoman scripts. Wooden bargeboard animates the lower rim of the gabled roof, and decorative finials resembling leaves punctuate the ridge's ends. The architectural treatment of the roof with its delicate woodwork pays homage to the earlier Victorian railway stations of the Haydarpaşa-İzmit line, but the references are, for the most part, more in the vein of the new station at İzmit, with an emphasis on solidity and authority through rustication, thick walls, and a sober yellow-brown color palette.¹⁸⁵ Transmutations can be identified only on close inspection. The finial's leaf motif differs slightly from that outlined in only rough detail on the station's elevation [Fig. 5.70], and the rustication pattern appears in the drawings as chamfered when in reality it is channeled, giving the actual buildings a slightly flatter appearance [Fig. 5.71].

¹⁸⁵ It is not entirely possible to guarantee that this was the original color scheme, but studies of the hues of black and white photographs as well as paint chips corroborate that these were the colors.

Along this section of the railway, a number of repetitive, typological elements serve an indexical function, not only relating the station and its campus to a consistent architectural program but also one with specific spatial symbolism. This includes the signage for the women's waiting room, still extant in but one station [Fig. 5.72] that redoubled the separation in plan in a graphic format on the wall. In Eskişehir¹⁸⁶ [Fig. 5.73] and Afyonkarahisar [Fig. 5.74], silos used to store grain adjacent to the railway station became the tallest structures in those two cities and highlighted the cities' new-fangled image as a city of modern commerce and industry on a national level as opposed to being regional centers known for minor local crafts and trade. Water towers, which varied a little bit in their materials and precise form, nonetheless were a reliable site at all stations along the railway [Figs. 5.75-5.76]. The fencing of the station campus perimeter and its structures, as mentioned previously being a key part of the design protocol, became a recurrent, practically corporate spatial leitmotif [Fig. 5.77].

5.7.4 Konya

Reinhold Menz, a German traveler who commented in 1893 on the new train hub at Eskişehir, provided one of the earliest reflections on the visual character of the Anatolian Railways when he noted that the city had “the character of a small north

¹⁸⁶ The Eskişehir station silo has experience a thriving new function after having been converted into an Ibis hotel.

German city in flat arable land.”¹⁸⁷ The sheer capacity to renovate the architectural and urban landscape was nowhere more on display, however, than it was in Konya, the deepest point in the Ottoman empire reachable by train for a full decade, 1896–1905, a symbolic terminus of the Anatolian Railways, and the future gateway of the evolving plans for the Baghdad Railway. Konya’s station and its environs would expand in scale and manifold importance after construction on the Baghdad Railway began, but its renovations in the preceding decade were not insignificant. Beyond the agricultural and economic growth that would be cultivated by the irrigation of the Konya Plain and the internal migration of thousands of laborers around the turn of the twentieth century, Konya’s location as a fulcrum between two generations of engineers and rail technology made it equally important as a center for knowledge transfer, including architectural knowledge.

This is made plain in the juxtaposition of the structures completed in 1896 and those constructed beginning in 1903 to keep pace with the city’s exponential rise. Although technically also a Class One station like Eskişehir and Ankara, Konya’s original station has significant differences that demonstrate the ability of the railway company as well as the Ministry of the Interior to promote variety within the rigid typology system¹⁸⁸ [Figs. 5.78–5.79] and that may in part be explained by the fact that, unlike the other drawings of the line, the drawing here bears the name of the architect

¹⁸⁷ Reinhold Menz, *Deutsche Arbeit in Kleinasien: Reiseskizze und Wirtschaftsstudie* (Berlin: J. Springer, 1893), 57. “Eskişehir hat den Charakter einer kleinen Stadt in Norddeutschland im Ackerbau treibenden Flachlande.”

¹⁸⁸ The cost of the expansion of the Konya station and its environs between 1903 and 1917 totalled 666,360.06 Lira (LTQ). Ba 8119f/8311.

Georg Kawerau (1857–1909) along with that of Mackensen, indicating Kawerau’s important role in symbolic interpretations and openness to adaptation.¹⁸⁹

While the building maintains the overall tripartite division evident in Eskişehir and Ankara, its character is enhanced by the full rustication of its lower level and a more delicate fenestration with wider panes and pronounced rounded upper profiles that express a sympathy with *Rundbogenstil*.¹⁹⁰ Bargeboard decorates the edge of the shallower cross-gabled roof on both its latitudinal and longitudinal profiles. The finials return to the original design and are higher and more pronounced, while the spacing of chimneys becomes regular, creating a rhythmic roofline. The most noteworthy space is the main vestibule, which doubles as the ticketing area and the waiting room for third-class passengers and presents a rich and unprecedented ornamental program comprising a coffered ceiling with hand-painted vegetal ornamentation [Fig. 5.80], a circumscribing frieze of railway landscape vignettes, amateur in appearance [Figs. 5.81–5.85], and four slender cast-iron columns, also with vegetal motifs. The first- and second-class waiting rooms, the *haremlik*, and offices flank both sides of this main hall.

¹⁸⁹ Kawerau participated alongside William Dorpfeld in exploring the ruins in Graecia and the excavations on the Acropolis of Athens from 1885 onwards. He returned to Germany and practiced architecture in Szczecin (Stettin). For his research on Greek ruins, he received an honorary doctorate of philosophy from the Justus-Liebig-Universität Gießen. Anonymous, “Auszeichnung,” *Zentralblatt der Bauverwaltung*, 27, No. 61 (1907), (unnumbered page); Anonymous, “Auszeichnung,” *Zentralblatt der Bauverwaltung*, 29, no. 33, (1909): 231–232.

¹⁹⁰ *Rundbogenstil*, a variant of the Romanesque revival particular to Germany and German communities and projects built abroad, was popularized by Heinrich Hübsch as a rejection of the Gothic Revival and a streamlining of Neoclassicism, its clean lines and relative smoothness thought to be more appropriate for the industrializing state and a burgeoning German nationalism. See Barry Bergdoll, *European Architecture 1750–1890* (New York: Oxford University Press, 2000), 184–89. The style was commonly associated with railway stations built in Germany in the 1850s and 1860s.

While several campuses of the Anatolian Railways had significant auxiliary structures, including workshops, depots, water towers, grain silos, and storage facilities, only a handful had freestanding houses for long-term railway employees and certainly none as extensive as Konya, where a veritable colony of eight homes, erected just north of the station, lent the larger campus the greatest evocation of a veritable *Heimatstil* colony [Figs. 5.86–5.87]. Seen from the newly constructed İstasyon Cadessi, the houses, fences, and landscaping hide the heavy industrial buildings behind them from view [Fig. 5.88]. The appearance is suburban. Close inspection reveals that the fencing system is reinforced by actual rails staked into the ground and embossed with their manufacturer’s name (here Krupp) and year of fabrication, driving home the fact that steel, even when sought for purposes independent of the railbed, was only available in the form of rails—and if used for other purposes, it needed to be appropriated.¹⁹¹

The now-abandoned workers’ colony also offers some impressions about railway bureaucrats and engineers’ everyday lives. Although modest, the homes provide all modern conveniences, as is clear in the mechanized layout of the kitchen where the sink, drying racks, and cupboards follow the progressive logic of the day that dictated facilitating and simplifying a housewife’s work through design of the “total

¹⁹¹ Krupp, by 1887 the largest single private employer in Europe, had its own experience with purpose-built worker villages, replete with parks, schools, and facilities for recreation, that bear some resemblance to the small *Siedlungen* established by the Anatolian and Baghdad Railway corporations. For a history of the corporation, see Harold James, *Krupp: Deutsche Legende und globales Unternehmen* (Munich: C.H. Beck, 2011). For a history of Krupp’s experiments in housing, see Daniel Stemmrich, *Die Siedlung als Programm: Untersuchungen zum Arbeiterwohnungsbau anhand Kruppscher Siedlungen zwischen 1861 und 1907* (Hildesheim, Germany: Olms, 1981). For Krupp’s relationship to colonial projects, specifically those in Africa, see Hermann Schröter, “Essen und die Kolonialfrage, Gründung und Geschichte der Sigipflanzung in Deutsch-Ostafrika,” *Tradition: Zeitschrift für Firmengeschichte und Unternehmerbiographie*, 12, no. 5 (October, 1967): 526–42.

environment”¹⁹² [Fig. 5.89]. Even the wallpaper appears to be imported from Europe [Fig. 5.90]. Touches of life at home can also be found outside, where several of the houses have small swing sets also made of rails [Fig. 5.91], as well as small fountains. The houses are detailed much like the main station, with bargeboard at the cornice line. The house closest to the station is larger than the others and appears to have a service as well as a main entrance, indicating that not only had the stationmaster of this major station been relieved of living in an apartment above the waiting rooms in the station building, but he also enjoyed a relatively privileged existence in one of the largest and sturdiest domiciles to be found in Konya circa 1896 [Fig. 5.92].

The main depot, across the tracks and hidden from view by the small colony, is also architecturally significant. Its wedge shape is typical for a rail shed where tracks branched off from a rotary, allowing up to ten locomotives and rolling stock to be housed for repair and other servicing. The sawtooth roofline [Fig. 5.93] of corrugated metal evokes some of the campus’s most recognizably industrial qualities, and while hidden from the street side, it was nonetheless prominently visible from the station platform. This makes its vista distinct from the other stations, such as those at Eskişehir and Ankara, where the main depots maintained less visual connection to the station, being placed on the same side of the track and camouflaged by other buildings and landscaping.

In scales and sites beyond the railway station, its main building, and the workers’ colony, the German imprimatur is nonetheless evident. Steel throughout the station’s

¹⁹² Although not as mechanized as Margarete Schütte-Lihotzky’s famed Frankfurter Küche of 1926, built for Ernst May’s New Frankfurt project, I would suggest that these kitchens demonstrate a protomechanization that became a leitmotif of German domestic design in the interwar years and that may have had particular relevance for this “colonial” setting because of the absence of familiar European household equipment.

campus is emblazoned with the “Krupp” insignia along with the year of its production [Fig. 5.94]. A handsome commercial building, perhaps erected by Deutsche Bank and/or the Railway Company, can be seen immediately across the street and likely functioned as a retail and office space related to the new commercial activities of the area. [Fig. 5.95] As Berggren’s photograph [Fig. 5.96] of the new Konak and another image of the new industrial school [Fig. 5.97] demonstrate, even structures initiated by the local government fell in line with the solid, symmetrical and orderly arrangement of the station buildings on the city’s outskirts.

A *Times* reporter traveling the railway for several weeks in September 1905 made a handful of telling observations.¹⁹³ In Konya, he (unnamed) noted the stark contrast of the new railway campus, of which he approved, with the city’s existing architectural character: “The most striking of the modern buildings at Konia [sic] is the railway station, which would not be a discredit to a European town of the same size.”¹⁹⁴ However, he was strongly disappointed with the station at Haydarpaşa: “In curious contrast,” he stated, “that [station] at Haidar Pasha [sic], the Constantinople terminus, is a very poor affair, and consists of a couple of wooden sheds.”¹⁹⁵ Over the course of two decades, the Ottoman railway network of Europe and the Marmara had been outmoded by the Ottoman railway network of Anatolia, whose clear delineation of typologies and sturdy and relatively consistent construction strategies gave it a discernible visual identity that raised the stakes for the imperial capital and its capacity for the architectural

¹⁹³ “The Land of the Anatolian Railway,” *The Times*, September 30, 1905. Located in Ba R901/6667.

¹⁹⁴ Ibid.

¹⁹⁵ Ibid.

signification of the imperial renovation centered far away physically but nearby in the hearts and minds of its people, particularly the Sultan. As Konya transitioned from terminus to the railway's next gateway, the German role in this process continued to expand and take on even loftier ambition.

5.8 The Station: The Hejaz Railway and its Palestinian Tributaries

5.8.1 Prefacing Pilgrimage

With the exception of the examples in Palestine, Damascus, and Medina, the railway stations of the Hejaz Railway and its tributaries demonstrate a general defensive quality that is unique, first and foremost due to the extensive employment of stone and minimal employment of glass, wood, and even steel. While the railway stations bear similarities to the rest of the network through their volumetric proportions, certain formal hierarchies and site planning strategies nonetheless reveal their transmutation through their distinct labor force, political and religious background, and environmental conditions. Beyond signifying the program of the holy pilgrimage, the railway stations of the Hejaz required unprecedented protection from two major adversaries—the weather (extreme sun and sandstorms) and the nomadic tribes that were infamous for robbery and destruction.¹⁹⁶

¹⁹⁶ Few Ottoman Turkish bureaucrats in İstanbul and even fewer Europeans had any firsthand knowledge of Bedouin tribes and their organization, and thus few were able to estimate their inclination toward a project such as the Hejaz Railway. Max von Oppenheim's extensive two-decade-long study on Bedouin tribes that began in 1904 (during the middle of the construction of the Hejaz Railway) contained "findings" that were most certainly circulated well before the eventual publication of the studies beginning in 1939. Oppenheim's study had become a crucible of Eurocentric knowledge on the subject and did little to refute the clichés of marauding robbers,

5.8.2 Typologies, Defined Spiritually

Because Meißner's oversight of the railway construction was purely contractual, systematic programs for designing stations in classes and typologies could only be achieved by recommendations to the Ottoman authorities. There are sufficient differences in layout between the buildings, despite their material similarities, to conclude that either Meißner was unable to institute a standardized building plan, or he simply chose not to. Nevertheless, a notional typological template arrives from a very different source: an Arab propagandist by the name of Muhammad 'Ārif Ibn al-Sayyid al-Munr al-Husayni'l-Dimashqī (fl. 1898–1908).¹⁹⁷ Ārif wrote a lengthy pamphlet entitled *al-Sa'āda al-nāmiya al-abadiyya fi'l-sikka al-hadīdiyya al-Hijāziyya* (*The Book Increasing and the Eternal Happiness—the Hejaz Railway*) in 1900, which promoted the railway and Arab cooperation with it and was later circulated to a variety of groups in southern Syria, Transjordan, and the northern Hejaz.¹⁹⁸ In the third chapter, Ārif describes the Hejaz

lawlessness, and bloodthirstiness, although he occasionally depicts the Bedouin resistance to change and modernization as a salve to the woes of modern life and the foreign infiltration of the Ottoman empire. Max von Oppenheim, *Die Bedouinen*, 3 vols. (Wiesbaden: Harrassowitz, 1939–1952).

¹⁹⁷ Ārif came from a well-known Damascus family (his father a Shafiite imam of some importance) and was provisional chair of the board of education in the Sanjak of Damascus (an armature of the Tanzimat reforms).

¹⁹⁸ A copy of the original manuscript is located at the Library of İstanbul University, Arabic MS 4780. According to Landau, “the manuscript numbers 157 pages of which the frontispiece and another 152 pages make up the book itself. It does not include a colophon, but appears to be either an autograph or—more likely—the work of a professional scribe, based on the author's draft. It is written in fairly clear Arabic, in black and red ink. The handwriting, close to *nasta'liq*, is actually of the *dīwānī* type, frequently used in the Ottoman empire during the nineteenth century. Although its point of departure is the railway controversy, it also contains interesting material on several other matters” (Landau, *The Hejaz Railway*, 23). Jacob Landau has called Ārif

Railway as having two parts: Damascus to Medina and Medina to Mecca, the latter never executed. Ārif outlines three types of stations within the first part, designated with their associated overland traveling times and establishing a poetic metaphor for understanding the proposed railway. The three types comprise the stations from Damascus to Ma'an (103 hours), those from Gadir al Hadsh to Meda'in Saleh (137 hours), and those from Al-'Ula to Medina (102 hours). Ārif's delineation of the three types is not an architectural proposal for the railway but rather an attempt to codify the phenomenological and spiritual qualities of these three discrete parts of the journey. Although the tripartite division is geographical and not hierarchical, it does demonstrate Ārif's familiarity with railways as a system of typological distinction organized by "stations," and in an attempt to arouse solidarity, he interprets this through the lens of piety.

The first type of station along the prospective route is characterized by the quality of abundance, emblemized by the riches of Damascus, the fecund river valleys of Transjordan, the generousness with which people share water, the prevalence of hospices, etc. The second type is characterized by the quality of hardship, emblemized by the tyranny of sand with its capacity to attack from the air and the ground, the lack of cooperation of camels, sudden illness, and the desperation felt upon leaving an oasis behind. The third type is characterized by thickets, whose utility would grow through

a "dedicated Arab apologist for Hamidian rule" (Landau, *The Hejaz Railway*, 23) who, by all accounts, did everything he could to oppose the Arab nationalist movement. His pamphlet sought to coalesce irredentist pockets of the empire under the auspices of the Hejaz Railway, and he disparaged Arabs, particularly Bedouins, whom he described as uncivilized in his four other known writings. Landau, a historian, located the previously published manuscript in Istanbul in the late 1960s and published a book that includes both the original Arabic and his own extremely faithful Arabic translation. See Jacob Landau, *The Hejaz Railway and the Muslim Pilgrimage: A Case of Ottoman Political Propaganda* (Detroit: Wayne State University Press, 1971), 21–30. Some reviews of the book shortly after its publication took issue with the fact that Landau cited himself as the author of this publication. Regardless, both Landau's introduction and the original text are seminal.

Allah's intervention of a successful railway line. Echoing the traditional literary depiction of the Hajj as a narrative journey from Damascus to the holy cities punctuated by an array of facilities—for sleeping, supplies, water, food, etc.—Ārif reinterprets the facilities as stations whose distance from one another (measured in rail hours) was comparable to the distance between conventional stops (measured in camel hours). Ārif thus allegorizes the station as an extension of a historical process, downplaying its relationship to technology and modernity per se and stressing its cosmic and religious qualities as opposed to its military or political ones. The allegory is reinforced by absence of any mention of the railway's expedience (in either time or money). Ārif's work should be understood, as it has been, as political propaganda, but it is also an excellent primary account of the vicissitudes of the transmutation of the railway, its economically rationalized European typological categories, and its architectural punctuations in new cultural and religious terms.

5.8.3 Damascus to Medina

In practice, masons utilized stone from local quarries for the route from Damascus to Medina, ranging from the near-black basalt in the vicinity of Medina to the bright yellow sandstone around Zumurrud. Urban locations along the route, such as Tabuk (1907) [Fig. 5.98] and Al- 'Ula (1907) [Fig. 5.99], featured gabled roofs and a two-story main station building with planar and sectional organizations that roughly follow the formula established by the third-class stations of the Anatolian Railways. Other stations, such those at Abu Na'am (1907) [Fig. 5.100] and Muazzam (1907) [Fig. 5.101], were

designed as tiered structures with flat roofs, the first of their kind to capitalize on the contractual permission of flat roofs in the construction prospectus. Several writers have argued that these were actually designed in response to the stationmasters' need to have flat elevated surfaces from which to defend the more rural structures from nomadic attacks,¹⁹⁹ which is supported by the exterior embedding of iron rungs in the mortar, leading from tight central courtyards (which provided some exterior space within the structure) to the roof. Other than the main door and windows at the upper levels, the walls were punctuated only by narrow loopholes allowing guards to protect the stations with rifles [**Fig. 5.102**]. Almost all of the stations have a single entrance and exit, allowing the stationmaster to control and monitor circulation into and out of the station. Certain smaller stations in the northerly region (such as Muazzam) contain arched porticoes, decorative appendages that are dispensed with further south because they probably proved to be a liability to good defense.²⁰⁰

An image of the construction of the station at Muazzam [**Fig. 5.103**] illustrates some of the process of masonry work. Several workers standing atop the structure appear to be laying the top row of stones, which, in contrast to the rough-hewn blocks of the façade, are smooth. A mechanical pulley system lifts the blocks up to the workers, who then affix the stones to one another with mortar. An array of stones on the ground surrounding the structure suggests that more blocks than necessary may have been quarried and cut, allowing the workers to choose in situ those that were best for their purposes. All stations had auxiliary structures, including water towers and workshops,

¹⁹⁹ Gülsoy, *Hicaz Demiryolu*, 126-30; Nicholson, *Hejaz Railway*, 31-32.

²⁰⁰ Nicholson, *Hejaz Railway*, 32.

that were also built of heavy stone. South of Tabuk, solidly built garrisons were further fortified by blockhouses [Fig. 5.104], and at Al- ‘Ula, the entire railway campus was protected by a surrounding stone wall.

South of Aleppo and from Damascus northward, the railways of Syria had been the domain of the French since 1895, when the line connecting Tyre and Damascus was executed by the Société Ottomane du Chemin de fer Damas-Hama et Prolongements. The only major stations to come from the lines built in Syria independent of German engagement were the original Damascus al Qadam station (1895) [Fig. 5.105] and the station at Homs (c. 1895). After Meißner completed his work for the Hejaz Railway, local authorities commissioned the construction of a grander ceremonial terminus. The project, which was constructed between 1913 and 1917 and designed by a Spanish-born architect and resident of Damascus, Fernando de Aranda (1878–1969) [Fig. 5.106], exhibits kinships with the German-designed stations that preceded it: Cuno’s Cilician stations and Jachmund’s Sirkeci station.²⁰¹

²⁰¹ Instituto Hispano-Arabe de Cultura, *Awraq: Estudios Sobre el Mundo Árabe e Islámico Contemporáneo*, vol. 9 (Madrid: Insituto Hispano-Arabe de Cultura, 1988), 232; Stefan Weber, *Damascus: Ottoman Modernity and Urban Transformation*, vol. 1 (Aarhus: Aarhus University Press, 2009), 103–113 (covering various issues of transportation infrastructure and architecture); Ross Burns, *Damascus: A History* (London: Routledge, 2005), 259; Zeynep Çelik, *Empire, Architecture, and the City: French-Ottoman Encounters, 1830–1914* (Seattle: University of Washington Press, 2008), 41; Antoinette Harri and Allison Ohta, eds., *10th International Congress of Turkish Art* (Geneva: Fondation Max van Berchem, 1999), 735; Brigid Keenan, “The Railway to Damascus,” *World of Interiors* 15, no. 3 (March 1995): 84–89; Steven Parissien, *Station to Station* (London: Phaidon, 2001), 126. Fahmy and Touret claim that the other station in Damascus, al Qadam, was designed by a German named Palmer (which does not appear to be a German name and does not appear anywhere else), although this is most certainly an error. See Adham M. Fahmy, “Between Mystical and Military: The Architecture of the Hejaz Railway (1900–1918),” in *Aptullah Kuran için Yazılar*, eds. Çiğdem Kafesçioğlu and Lucienne Thys-Şenocak (İstanbul: Yapı Kredi Yayınları, 1999), 372; Richard Tourret, *Hedjaz Railway* (Abingdon: Tourret Publishing, 1989), 27.

The station and campus at Ma'an (1906) in southern Jordan is a perfect example of how the conventions of the Anatolian and Baghdad railways could well apply to the architecture of the Hejaz Railway. The station, apart from its being built from stone, is little different in plan or arrangement from the Class Two stations of the Anatolian railways, being made of two stories with the same sectional division of passenger facilities on the lower level and office facilities on the upper level. Because the station was in a settled and relatively peaceful community, it did not need to be fortified and thus retains some of the picturesque qualities of the stations in Anatolia.²⁰² This arrangement can also be found in a number of other settled locations, including Al- 'Ula [**Fig. 5.107**] and Tabuk.

5.8.4 Medina

The terminus at Medina displays a symbol-laden ornamental program unlike any other station on the Hejaz railway and represents the railway network's clearest statement of its religious function. The building was commissioned by Meißner and designed by the young Haifa-based German Jewish architect Otto Lutz (b. 1882).²⁰³ Comprising eleven freestanding structures and the main station building, the terminus sits on a 133-acre

²⁰² Eugene L. Rogan, *Frontiers of the State in the Late Ottoman Empire: Transjordan 1850–1921* (Cambridge: Cambridge University Press, 2002), 31.

²⁰³ There are very few records of Lutz. His only other known work is as architect of Alonei Abba, a semi-cooperative village near Lake Tiberias, and a project on Jaffa Road. See Adham M. Fahmy, "Industrial Monuments in the Holy Land: The Architecture of the Hejaz Railway in Arabia (1900–1908)" (master's thesis, American University in Cairo, 1994); Herbert Gilbert and Silvina Sosnovsky, *Bauhaus on the Carmel and the Crossroads of Empire: Architecture and Planning in Haifa during the British Mandate* (Jerusalem: Yad Izhak, 1993); Çelik, *Empire, Architecture, and the City*, 41.

parcel of land adjacent to the Al Anbarya mosque [Figs. 5.108–5.109]. The station’s façade on the city side is a low and impressive composition: a portico consisting of seventeen pointed arches flanking a two-story main hall with twelve bays [Fig. 5.110]. The structure has three primary entrances, with the easterly being the primary entrance for passengers, leading from the portico through a courtyard to the rail platforms. The station’s upper portion, which was not completed by the time of the station’s inauguration in 1908, is built from basalt and limestone and contains a series of paired arched windows beneath a larger round window set in a frame of alternating basalt and limestone voussoirs [Fig. 5.111]. The window composition has its most direct parallels with those of the Sirkeci station with the strict geometries of their muntins and use of kaleidoscopic stained glass, possibly indicating that the window frames shared a similar manufacturer from Germany and also possibly indicating the involvement of the German glass artist Otto Linnemann (1876-1961), known for his work at Haydarpaşa station. This is likely why some have attributed the Medina station’s design to Jachmund.²⁰⁴ The muqarnas detailing of the porticoes’ column capitals [Fig. 5.112] evinces Lutz’s familiarity with the principles of Ottoman classicization promoted in Montani Effendi and Boghos Effendi Chachian’s *Usul-u mimari-i Osmani*, while the color palette and patterning reveal a familiarity with the architecture of Cairo.²⁰⁵ The composition also has Western motifs in

²⁰⁴ Burcu Doğramacı, *Kulturtransfer und nationale Identität: Deutschsprachige Architekten, Stadtplaner und Bildhauer in der Türkei nach 1927* (Berlin: Mann, 2008), 48–49; Fahmy, “Between Mystical and Military,” 367–77.

²⁰⁵ Marie de Launay, *L’architecture Ottomane* (Constantinople, 1873). A number of important historiographic questions in architecture hinge on *Usul-u Mimari-i Osmani*. See, for example, Sibel Bozdoğan, “Reading Ottoman Architecture through Modernist Lenses: Nationalist Historiography and the ‘New Architecture’ in the Early Republic,” in “Essays in Honor of Oleg Grabar,” special issue, *Muqarnas* 24 (2007): 199–221. See also Ahmet Ersoy, “A Sartorial

the entablatures on either end. Other structures on the campus, including the stationmaster's residence, operations center, staff lounge, passenger building, main storehouse, workshop, goods office, water tower, maintenance supervisor's residence, and toilets, appear to have been built by the same amalgamation of engineers and craftsmen who had built the other stations along the line, as these assume the same *Heimatstil* compositional formulas, executed in exposed, rough hewn ashlar.²⁰⁶

5.8.5 Jaffa to Jerusalem, Daara to Haifa

While the Jaffa-Jerusalem line would ultimately be realized through Ottoman Jewish financial backing and French contractors, its purpose—since it had been conceived and propagandized by Zimpel in 1865—would serve a number of key German interests that are not easily divorced from those who ultimately realized it.²⁰⁷ A case in point is the infrastructural role the line played in connecting the established German colonies of Hamoshava Hagermanit in Jeruslaem with those at Jaffa and Sarona and, in turn, the sea, providing a critical apparatus for the development and proliferation of several aspects of German material culture.

It was, however, the Hejaz Railway's branch line (known as the Jezreel Valley Railway) leading westward from Daara to the excellent natural harbor of Haifa that gave

Tribute to Late Tanzimat Ottomanism: The Elbise-i, Osmaniyye Album," *Muqarnas* 20 (2003), 187-207.

²⁰⁶ See Fahmy, "Between Mystical and Military," 367-77; Nicholson, *Hejaz Railway*, 180-83.

²⁰⁷ Zimpel, *Railway between the Mediterranean*.

that area of Palestine the architectural imprimatur of German presence. The line had initially been spearheaded by a British syndicate, the Shipbuilding Engineering Company, led by W. Hills of the Thames Ironworks.²⁰⁸ Despite the fact that the line exclusively represented English business interests, Hills employed Schumacher, through the Palestine Exploration Fund, to execute the surveys spanning the thirty-seven miles on either side of Lake Tiberias and thus involved a key member of the German community in Palestine in the project.²⁰⁹ By 1905, only five miles had been completed, and the British turned the construction over to Ottoman hands.²¹⁰ The Ottomans put Meißner on the project and the line was in full operation by May 1906.²¹¹

The station at Haifa, originally planned to be immediately adjacent to the new port facilities, comprises a cubic two-story central unit flanked by two side units with pitched roofs²¹² [Fig. 5.113]. The central volume has a small entablature at its top and supports a small cubic tower with a clock. The entire structure is made of smooth hewn ashlar blocks, and the windows are adorned with wooden shutters. The visibility of the simple block within the rather classical structure highlights a certain inherent tension—

²⁰⁸ Nicholson, *Hejaz Railway*, 50.

²⁰⁹ Records of this are held at the Palestine Exploration Fund.

²¹⁰ Ibid., 51. See also Yfaat Weiss, *A Confiscated Memory: Wadi Salib and Haifa's Lost Heritage* (New York: Columbia University Press, 2011), 158.

²¹¹ Nicholson, *Hejaz Railway*, 54. Some sources claim that the date was actually late 1905. The author abides by Nicholson, as this source appears to be the most reliable. The best general history of the line is Cotterell, *The Railways of Palestine and Israel*.

²¹² Because of a port expansion and the employment of landfill, the station no longer has a direct proximity to the waterfront. See also Weiss, *A Confiscated Memory*, 158. There is no reliable account of who the architect of the station may have been, although it is self-evident that there was one.

with the structure's palpable civic ambitions tethered to the ground realities of Palestine's limited resources, its building culture of stone, and its hot climate.

5.9 The Station: The Baghdad Railway

5.9.1 The Faces of Consolidation / Penetration

The British Vice Consul to İzmir, Clifford Edward Heathcote-Smith (1883–1963), remarked, while traveling between Konya and the newly constructed station in Ereğli in 1907, that “all along this section the stations are the most excellent buildings, and everything has been done to give an impression of power and wealth. Although the higher officials are German, there has been no attempt to give too German a character to the line.”²¹³ While not all contemporaneous accounts concurred that the overall impression of the railway was free from a German “character,” most support Heathcote-Smith's contention that the Baghdad railway attempted to convey “wealth and power” more markedly than its precursors. Nowhere would this become clear than in the renovation of the İstanbul terminus, which began in earnest in 1905.

²¹³ C. E. Heathcote-Smith to N. R. O'Connor, Aleppo, July 17, 1907, NA FO 881/9437.

5.9.2 The New Haydarpaşa Station

As the port of Haydarpaşa increased in importance after the completion of the Anatolian Railways and with the decision to extend the railway network yet further toward Baghdad, it became abundantly clear that Haydarpaşa's railway station was outmoded, both technologically and stylistically. As early as June 1895, with the Anatolian Railways not yet completed and the Marmara region still reeling from the previous summer's earthquake, the press noted stopgap repairs and hinted that a new station was necessary:

At Haidar Pacha [sic] railway operations and services have been so badly damaged [by the earthquake] that much has had to have been demolished and rebuilt—the station building from the ground floor up, the office building from the ground up, and [elsewhere] the entirety of the stations in Maltepe and Tuzla and the greater part of the station in Pendik are to be completely rebuilt.²¹⁴

While the Anatolian rail line itself had proved strong enough to withstand the earthquake, the demure buildings of two decades earlier were more vulnerable to the region's considerable seismic activity.

In April 1899, the Anatolian Railway Company established a daughter company for the construction and operations of the Port of Haidar Pacha (*Société du Port de Haidar-Pacha*), which in addition to revamping the actual station undertook a massive reconfiguration of the port itself. Sectional drawings cutting through the Bosphorus and the existing port were executed by a certain “H. W.” for the German Embassy in Istanbul, with their French annotation indicating that they were prepared for the Porte [**Fig. 5.114**].

²¹⁴ “Anatolische Eisenbahn-Gesellschaft,” *Berliner Börsen-Courier*, June 24, 1895, located in Ba R901/15067: “In Haidar Pacha [sic] sind Bahnhofsförderungsdienste so beschädigt worden, dass sie abgetragen und neu aufgebaut werden mussten, und zwar Bahnhofsgelände vom Erdgeschoss an, das Dienstgebäude von Grund auf; ebenso mussten die Bahnhöfe in Maltépé und Tuzla und der größte Theil [sic] des Bahnhofs in Pendik vollständig neu aufgebaut werden.”

An additional drawing shows the projected jetty surrounded by numerous boats, signifying the primacy of the renovation of the port functions over the later architectural changes [Fig. 5.115].

The project designs, presented to the Sultan sometime in late 1899 or 1900, were directed by Zander²¹⁵ and Huguenin. Among the architectural elements of the port's renovation were a breakwater and ceremonial column celebrating the anniversary of the sultan's coronation and dedicated to him on his birthday, December 17, 1902. The architect Alexander Vallaury (1850–1921), designer of the Imperial Ottoman Bank Headquarters (1890) and numerous other prominent buildings in the city, was chosen to design the column, and his composition includes the requisite *tuğra* and a commemorative inscription²¹⁶ [Fig. 5.116]. Whether by mistake or indicating a later change of plan, in July 1904 the *Moniteur Oriental* announced Vallaury as the architect not only of the jetty column, but also of the new station.²¹⁷ The very existence of this misinformation may indicate the public's assumption that such a major work of

²¹⁵ Zander made his imperialistic interests in the Ottoman Empire plain in 1916. See Kurt Zander, "Türkei und Mitteleuropas wirtschaftlichen Schützengraben," *Deutsche Revue über das gesamte nationale Leben der Gegenwart*, 41 No. 2, (May 1916), 185-96.

²¹⁶ Semavi Eyice, *Türkiye Diyanet Vakfı İslam Ansiklopedisi*, vol. 17 (Istanbul: Türkiye Diyanet Vakfı, 1998), 39. The inscription reads: "REVNAK EFZAYI SEDİRİ ŞEVKET-MASİRİ OSMANİ ESSULTAN İBNİ-SULTAN ELGAZİ ABDÜLDHAMİD HAN-SANİ HAZRETLERİNİN YİRMİ-BEŞİNCİ SENE'İ DEVRİYE'İ CÜLUSİ-HÜMAYUNLARININ HATİRA'İ FAHİRESİ-OLMAK ANADOLU DEMİRYOLU-ŞİKETİ OSMANİYESİ TARAFINDAN-IŞBU AMUD TEYEMMÜNEN REKZ OLUNMUŞTUR 1318/1902." (THIS COLUMN HAS BEEN BUILT IN HONOR OF THE TWENTY-FIFTH YEAR OF THE ACCESSION OF THE SULTAN ABDÜLHAMİD KHAN II, SON OF THE SUBLIME, THE LIGHT OF THE SPHERES, THE SULTAN OF THE OTTOMAN EMPIRE, SULTAN ELGAZİ, BY THE OTTOMAN ANATOLIAN RAILWAY COMPANY AS A MONUMENT. 1318/1902). According to Eyice (39), the monument has an uncanny similarity to one on the Hamidiye Boulevard in Salonica. See also Sait Toydemir, "Haydarpaşa Limanının İnşası," in *Demiryol* (special printing, Özel Sayı, 1954), 13–15; Yavuz, *Eine vergleichende Studie*, 49.

²¹⁷ *Moniteur Oriental*, July 21, 1904. Alexander Vallaury is referred to as "M. Vallauri".

architecture would not be executed by the mere engineers who were concurrently designing the railway's technical aspects, but rather by a proper architect who had already proven himself in a major work in the city. Such would not be the case.

Even before ground was broken for the new station building, the press was commenting on the vastly improved nature of the port as a result of the German renovations. "A first look at the railway building," said German writer Fedor von Zobeltitz (1857–1934) in 1904, "shows that the Germans have been in charge here. No dirty makeshift shelters, instead massive buildings with an inviting ambience, clean uniforms and good restoration: all that is quite unusual for the orient."²¹⁸

The Ottoman railway network's symbolic gateway to Asia is its most architecturally ambitious station and also its most well-documented. Records from the Holzmann archives suggest that the station received considerable attention as a veritable work of architecture, not merely as a station for engineering purposes.²¹⁹ The design, which went through a number of iterations and clearly communicates its spatial and stylistic goals, employed a team of several experienced architects, all of which distinguishes it from its peers. This was in no small part due to the important role of the architect Hellmuth Cuno (1867–1951) who had joined Holzmann in 1904 and had

²¹⁸ Fedor von Zobeltitz, "Ein Ausflug nach Anatolien," in *Velhagen & Klasings Monatshefte* 19, no. 4 (December 1904): 543. Zeynep Aygen, whose accurate translation I use here, misidentified the subject of Zobeltitz's comment as the new Haydarpaşa station, which had not yet begun construction in 1904. She also misattributed "Zobelitz" and "Zabeltitz." See Zeynep Aygen, "A Ship Sailing East with its Voyagers Travelling West: Architectural Saints, City Fathers and Design Patrons in the Late Ottoman Empire," *Journal of Design History* 20, no. 2 (July 2007): 104.

²¹⁹ ISg W1/2 268; W1/2 278; W1/2 297; W1/2 298; W1/2 369; W1/2 463; W1/2 475; W1/2 518.

previously played a leading role in the design of Frankfurt's new City Hall.²²⁰ In 1905, the same year construction began on the new Haydarpaşa station, Cuno was appointed director of the Baghdad Railway's *Hochbau* division and stationed in İstanbul. There he oversaw the construction of all of the network's buildings until his departure in 1914. The drawings for the project are dated mostly from September 1906, revealing that Cuno had spent approximately a year in İstanbul working on the design for the stations before submitting them to the Ministry of the Interior for approval.

From the drawings that remain, there appear to be two different designs that were prepared concurrently, indicating that Edhem Pasha and the Sultan may have been presented with more than one option when asked to sign off on the design [Fig. 5.117]. The designs, while not radically different, demonstrate how options were presented as stylistic choices: a somewhat Neo-Baroque version or a Neo-Renaissance version. The design chosen adheres to the elevations specified in the latter. By the time of the building's inauguration in November 1909, the Sultan had already been deposed and thus did not attend the festivities, despite the project's major significance to him.²²¹ Inscriptions denoting both the Hijri (1325) and the Gregorian (1909) calendars festoon

²²⁰ Hellmuth Cuno, "Hochbauten in der Türkei," in *Philipp Holzmann Aktiengesellschaft: Im Wandel von hundert Jahren 1849–1949*, ed. Hans Meyer-Heinrich (Frankfurt am Main: Umschau Verlag, 1949), 267. See also Pohl, *Philipp Holzmann*, 115.

²²¹ The concourse was opened earlier, in August 1908. An inauguration ceremony for the railway station took place in early November 1909 and was attended by a number of high-ranking Turkish and German officials. See Anonymous, "Die Einweihung des Bahnhofs von Haidar-Pascha," *Osmanischer Lloyd*, November 5, 1909; Yavuz, *Eine vergleichende Studie*, 52.

the building's two main entrance portals and commemorate the completion of its construction as does Abdülhamid's *tuğra*.²²² [Fig. 5.118].

An impressive album of hitherto unpublished images in the Holzmänn archive contains twenty-five matted photographs of the building, which appear to have been taken as a comprehensive monographic portrait shortly after its completion. As the building has had a rather tumultuous history over the course of the last century, bearing witness to major fires, earthquakes, hackneyed renovations, and, eventually, the complete elimination of its purpose as a train station,²²³ these images provide the purest impression of how the building was envisaged and realized by its authors. [Figs. 5.119-5.135]

Whereas the development of the building's elevations signified relatively conservative historicist impulses, the station's site planning reveals some of its most progressive and technologically advanced and flaunt German technicalism and expertise in such a way not seen elsewhere on the railway. The land acquired for the Port Society's

²²² Mehmet Yavuz, "Osmanlı'da Alman Mimarlar ve Eserleri," in *TÜRKLER*, eds. Hasan Celal, Kemal Çiçek, and Salim Koca, vol. 15 (Ankara: Yeni Türkiye, 2002), 405.

²²³ In 2012, Haydarpaşa Station was privatized and closed to public traffic indefinitely. Many local and international parties feared this meant its destruction or reuse as something other than a station. The World Monuments Fund placed it on their "Watch List," noting that "for over a century, the historic Haydarpaşa Railway Station has stood as an iconic image on Istanbul's skyline and as the symbolic gateway to the city. Built by the German-owned Anatolian-Baghdad Railway and designed by architects Otto Ritter and Helmuth Conu [sic], the station was a terminus of the Istanbul-Medina-Damascus railway line and later for routes to Anatolia. Heavily damaged during World War I but rebuilt in its present configuration, Haydarpaşa witnessed the country's transformation from the Ottoman empire to the Turkish Republic. There is strong community support for an adaptive reuse of Haydarpaşa Railway Station that will preserve public access and open space, as well as balance economic, environmental, and social concerns. Its redevelopment requires public engagement and transparency, and could serve as an important model for reinventing cultural heritage in the context of changing cities." "Haydarpaşa Railway Station," World Monuments Fund, accessed September 16, 2013, <http://www.wmf.org/project/haydarpasa-railway-station>. The World Monuments Fund's partial misattribution of Otto Ritter as an architect of Haydarpaşa, likely stems from confusion between Hermann Ritter (Cuno's supervisor) and Otto Riese, a Holzmänn engineer.

expansion stretched between the English Cemetery and the Haydar Baba Türbesi, which spelled the destruction of several historic buildings near the smaller previous station building, including several historic warehouses and other small structures.²²⁴ Yet the newly acquired land was still not deemed sufficient by the Holzmann engineers, who then developed a design that placed the station and its frontal plaza partially over water. This was accomplished by the ambitious efforts associated with pile-driving 1,700 wooden posts sixty-nine feet into the Bosphorus seabed. The area comprised just less than one acre, and while not technically landfill, the building platform that was constructed represented one of the most extensive land reclamation efforts of its day.²²⁵

The building's foundation employs granite blocks quarried in Hereke and transported thirty-nine miles by rail. The structural shell is a dense steel frame clad in heavily plastered masonry and brick, hiding its essentially modern substructure with a thick veneer of traditional materials. Such is also the technique in the interior, where slightly arched ceilings, abutted by lavishly employed plastered bricks, camouflage the orthogonal steel frame [Fig. 5.136]. Thick sandstone in hues of grey, green, and yellow employed for a handful of rusticated elements on the building's Bosphorus façade was quarried in Lefke, also along the Anatolian Railways at about kilometer marker 195, demonstrating once again the self-referential system of the building's material composition. The head mason coordinating the stonework, Lazarus (probably indicating his status as Jewish), oversaw the work of several subordinate masons of German and

²²⁴ These are notable in historic maps of the area; also see Begüm Akkoyunlu, "İstasyonlar: Kentin Kapıları," *Focus-Popüler Bilim ve Kültür Dergisi* 10 (2003): 60–61.

²²⁵ Anonymous, "Haydarpaşa Mevkîfî—La nouvelle Gare de Haidar Pacha," *Servet-i Fünun* 896 (1908): 181.

Italian nationality.²²⁶ The massiveness of the building can be gauged from the volumes and weights of its material palette: 88,287 cubic feet of stone quarried from Lefke, 459,091 cubic feet of brick and concrete, 1,141 tons of iron, 18,364 cubic feet of wood, and 66,736 square feet of slate roofing.²²⁷

The building's three main façades [**Figs. 5.137–5.139**] articulate the stylistic aspects of the design most vividly. The western façade, facing the city's European shores along the Bosphorus, is its main and most ceremonial one, privileged by its position at the water's edge and thus most visible from the ferries shuttling passengers from Europe to Asia. The delineation of the piano nobile at mezzanine level, where windows are framed with classicizing details, including small individual pediments, reinforces the building's Neo-Renaissance posture. The rounded towers on the northern and southern edges taper to a cupola which, the author has argued elsewhere, makes vague allusions to a minaret, perhaps the only Islamicizing detail of the design apart from the inscriptions.²²⁸ [**Fig. 5.140**] They are nonetheless unified with the rest of the composition, primarily through their continuation of the cornice line that bends fluidly from the main facades to the longitudinal ones. The cornice and the balconies of the piano nobile define a composition of three roughly proportional horizontal parts punctuated by serliana

²²⁶ Hellmuth Cuno, "Hochbauten in der Türkei," 267.

²²⁷ Anonymous, "Haydarpaşa Mevkîfî—La nouvelle Gare de Haidar Pacha," *Servet-i Fünun* 896 (1908): 181.

²²⁸ Peter Christensen, "The Eurasian Hour: Ratzel, Mackinder and the Architecture of Geopolitical Identity," in *Architecturalized Asia: Mapping a Continent Through History*, eds. Vimalin Rujivacharakul, Hazel Hahn, Ken Tadashi Oshima, and Peter Christensen (Hong Kong and Honolulu: Hong Kong University Press and University of Hawai'i Press, 2013), 101–20.

windows. The façades are for the most part devoid of ornament beyond the historicist ordering.

The station's plan [Fig. 5.141] is U-shaped, with the northern wing shorter than the southern, and frames the ends of four tracks partitioned by three 820-foot-long longitudinal platforms that meet at a single broad platform parallel to the main Bosphorus edge. Ground level spaces are primarily dedicated to passenger services, including ticketing, reservation, and information offices, waiting rooms, sanitary facilities, a restaurant, and a post office. The main reception hall, directly off of the main entry, serves as the main ceremonial space, with four large pillars dividing the space into three separate areas, each with its own cashier and ticketing vestibules. The southern portion of the reception hall opens up on a long corridor that spans the majority of the longer southerly wing and provides access to a few administrative offices, the first- and second-class [Fig. 5.142] and third-class [Fig. 5.143] waiting rooms and the *haremlik*²²⁹, and sanitary facilities, terminating at the restaurant (*lokanta*). Although the spaces are connected by the corridor, the primary path of longitudinal access was always envisioned as occurring outside of the building along the track edge, choreographing an interplay between the bulky inside spaces and the airy train courtyard. The restaurant also has an

²²⁹ Menz interpreted the *haremlik* as follows: "Das Haremlik (Frauenraum) war auf den großen Bahnhöfen ein besonderes Zimmer; auf den kleineren Stationen bildet dasselbe einfach eine durch gekreuzte kleine Lattenstäbe vergitterte Bucht in einer Ecke des Wartezimmers. In Haidar Pascha [sic] war auch ein besonderer Schalter für Frauen, um bei Andrang unkeusche Berührungen zu vermeiden, und in den Zügen sind, in der Türkei selbstverständlich, besondere Wagen oder Abteile für die bessere Hälfte der Bevölkerung, die auch auf den Schiffen und sogar den Pferdebahnen vorhanden sind." ("The haremlik [waiting space for women] was allotted in the large stations a special room, while the smaller stations simply a confinement of small batten bars lay in the corner of the waiting room. In Haidar Pasha [sic] there was also a special button for women of the better half of the population of Turkey to avoid unchaste touches in crowded situations, as are common in trains cars, compartments, on ships, and even horse trams. " Menz, *Deutsche Arbeit in Kleinasien*, 71–72. See also Yavuz, *Eine vergleichende Studie*, 55.

entrance to the Bosphorus concourse on the station's southern façade [Fig. 5.144]. The administrative services are reached by a curving staircase that terminates in a round room on the structure's southeasterly edge [Fig. 5.145]. The northern wing space is primarily dedicated to administrative functions and some passenger services, including luggage storage. The second through fifth stories provided the main administrative spaces for the Anatolian and Baghdad Railway companies, and the rounded corner towers provided, among other ceremonial spaces, the symbolic seat of power for the director's office [Fig. 5.146].

The main reception hall exhibits the building's most extensive ornamental program. With its soft and delicate motifs and color scheme, the program is largely at odds with the hulking disposition of the building's exterior [Fig. 5.147]. The lower sections of the hall are covered in a toned granite, recalling similar uses in the contemporaneous civic structures in the Ottoman empire, including Vallaury's bank building. Arabesques, scrolls, and rosettes embellish the ceiling and upper portions of the walls [Fig. 5.148]. The geometric stained glass was designed by Linnemann, a Frankfurt art professor and specialist in glass ornament who had also collaborated with Holzmann in the decorative painting of the German Evangelical Church in İstanbul and the chapel of the German embassy in Tarabya²³⁰ [Figs. 5.149]. The tiles of the restaurant, in contrast, have Ottoman origins in the designs of the tile master Mehmed Emin Usta (fl. 1900–1915), who articulates a strong preference for Kütahya tiles, perhaps because of that

²³⁰ Cuno, "Hochbauten in der Türkei," 266; Pohl, *Philipp Holzmann*, 106; Rudolf Linnemann, *Otto Linnemann and Rudolf Linnemann, Verzeichnis einiger in den letzten 25 Jahren durch unser Atelier ausgeführten Glas- und Wandmalereien* (Frankfurt am Main: Englert & Schlosser, 1914).

city's status as a part of the new railway network²³¹ [Fig. 5.150]. The two waiting rooms make subtle differentiations through their distinct ornamental programs and furnishings. Whereas the third-class waiting room is lined in tiles, the first- and second-class waiting room is paneled in wood, suggesting the tiles' perceived inferior status.

The administrative sectors of the building exhibit an incongruous usage of Gothic groin vaulting in the ceiling of the round tower connecting the ground level to the upper administrative levels. The monumental marble staircase alternates between black and lighter tones to create a striking visual rhythm. The upper levels have been radically transformed and demonstrate little of the original condition, but Yavuz notes the preservation of one space—the so-called “Permi-space”—replete with inlaid wooden panels artfully decorated with vegetal motifs.²³²

The building received various critical assessments upon its completion. Cuno himself described the building as an adaptation of the local character and landscape, an opinion roundly rejected by a number of members of the Ottoman press and architectural circles.²³³ The critics and historians Oktay Aslanapa, Semavi Eyice, and Yıldız Salman have all given the building lukewarm or negative assessments, focusing on what they view as its awkward synthesis of styles and the design's relative incongruity with its

²³¹ E. Toker, “Bir Dönemin Simgesi Haydarpaşa Garı,” *Gezi*, May 8, 1998, 66–87.

²³² See also Mehmet Yavuz, “Osmanlı'da Alman Mimarlar ve Eserleri,” in *TÜRKLER*, eds. Hasan Celal, Kemal Çiçek, and Salim Koca, vol. 15 (Ankara: Yeni Türkiye, 2002), 406. The author has not been able to access this space personally and has not been, unfortunately, able to find historical images of it.

²³³ Cuno, “Hochbauten in der Türkei,” 265: “sich mit Geschmack und Geschick dem Charakter der unvergleichlich schönen Lage in der Landschaft anpasste.” See also Yavuz, *Eine vergleichende Studie*, 61.

Turkish and Bosphorus context.²³⁴ And although it is unclear whether or not it was meant as a compliment, K. Bora Yılmazyigit identified Haydarpaşa as Cuno's "Western response to the Sultanahmet Mosque and Topkapı Palace" on the other side of the Bosphorus.²³⁵

The German press placed the project in a much more positive light. The German language daily *Osmanischer Lloyd*, published in İstanbul beginning in 1908, focused on the station's functional aspects:

Suffice it to say that there is hardly a station building in Europe that has as convenient and richly-equipped warehouses and commercial premises as this construction, which is on the soil of Asia Minor. The space is utilized with great skill, and everywhere a clever and practical sense prevails. The waiting rooms are spacious and offer every convenience, the working spaces are in the most exquisite taste.²³⁶

The *Tägliche Rundschau* exclaimed in 1916:

The Baghdad Railway Station at Haidar Pasha [sic] is, for anyone who sees it for the first time, a surprise. It is as if the purely German Renaissance building has been plunked down in the middle of the wilderness of the former landing site of Haidar Pasha [sic] to

²³⁴ Oktay Aslanapa, *Osmanlı Devri Mimarisi* (İstanbul: İnkılâp Kitabevi, 1986), 461; Eyice, *Türkiye Diyanet*, 39; Salman, "Haydarpaşa Garı," in *Dünden Bugüne İstanbul Ansiklopedisi*, 30. See also Yavuz, *Eine vergleichende Studie*, 62. Salman's comment, describing the building purely as an (uncritical) composition of styles, is particularly revealing: "Binanın deniz cephesi Neo-Rönesans düzende olmakla birlikte, gerek zemin kattaki sepet kulpu biçimindeki kemerler, pencere ve kapı alınlıklarındaki dolama dal kartuş ve girland gibi barok bezemeler ile balkon korkulukları, gerekse de doğu ve batı cephesindeki çıkmalarla bina 19. yy seçmeci üslubunu yansıtmaktadır." (Save its placement at the sea at ground level, the building's façade is of Neo-Renaissance order, as evinced in the form of the basket handle arches, the window and door pediments with their baroque embellishments, such as winding branch garlands with cartouches and balcony railings, as well as the eaves of the east and west side, all reflecting the eclectic nineteenth-century styling.)

²³⁵ K. Bora Yılmazyigit, "Garlar—Chemin de Fer Ottoman d'Anatolie—Demiryolu Boyunca Mimarlık Eylemleri," in *Arredamento Dekorasyon*, January 22, 1991, 138. Yılmazyigit states: "İki Prusyalı, Otto Ritter ve Hellmuth Cuno 1906'da tasarladıkları Haydarpaşa gar binasında, Topkapı Sarayı ve Sultanahmet'e, köşe kuleleri ve ... çatılarıyla meydan okuyorlar." Yılmazyigit misidentifies Otto Ritter as architect of Haydarpaşa, likely from confusion between Hermann Ritter (Cuno's supervisor) and Otto Riese, a Holzmann engineer.

²³⁶ Anonymous, "Die Einweihung des Bahnhofs von Haidar-Pascha," *Osmanischer Lloyd*, November 5, 1909.

thereby interpret the Baghdad Railway as an Oriental project born not of English or French influence, but as a German project leading into the heart of the East.... On the ground floor travelers have everything they could possibly need. It is believed to be one of the largest central train stations.²³⁷

Regardless of the critical reception, Haydarpaşa quickly emerged as the Ottoman empire's most (and probably last) important building of the twentieth century, one which did as much to signify the German-Ottoman relationship as it did to suss out the architectural directions of its future.

5.9.3 Konya to Kıralan

Construction of the Baghdad Railway beyond Konya began in earnest in July 1903, even before that November's formal establishment of the Gesellschaft für den Bau der Eisenbahn Konia-Eregli[sic]-Bulgurlu, an organization that would bring the railway to the foot of the Taurus Mountains. The new society not only transferred administrative personnel (Otto Riese and Kurt Zander) from the Anatolian Railways; it also employed the same head engineer and architect, Ernst Mackensen, who would, as he had with the Anatolian Railways, oversee the construction of the line from regional headquarters (this time at Konya, with smaller satellite offices in Ereğli) while plans were actually drawn up in the İstanbul office. Riese and the engineer Hermann Galewski (fl. 1905–1940) also

²³⁷ Anonymous, *Tägliche Rundschau*, August 17, 1916. "Der Bahnhof der Bagdadbahn in Haidar Pascha [sic] ist für jeden, der ihn zum ersten Male sieht, eine Überraschung. Es ist, als ob die Bagdadbahn bewusst einen rein deutschen Renaissancebau mitten in die ehemalige Wildnis der Landestelle von Haidar Pascha [sic] hingesetzt hat, um dadurch den ehemals im Orient so einflussreichen Engländern und Franzosen anzudeuten, dass von hier an ein deutscher Schienenstrang ins Herz des Orients führen soll... Im Erdgeschoss aber ist alles für die Reisenden und ihre Bedürfnisse freigehalten. Man glaubt unwillkürlich, auf einem der größten deutschen Hauptbahnhöfe zu stehen."

participated in the design of this section's nine railway stations, and their names appear on the drawings.²³⁸ Like the Eskişehir-Konya line, the stations were divided into Class One, Class Two, and Class Three stations. Konya was the only Class One station, while Ereğli (1905) and Karaman (1905) punctuated the line as Class Two stations. The remaining seven interstitial stations were Class Three.

Among the Class Three stations, there is little evident deviation from Mackensen's earlier designs apart from the rectangular treatment of windows, a partial, subtler use of archways above doors, and the curious and most unusual appearance of a decorative shield on the upper portion of some of the ticket windows, as in Ayrançiderbent. Yavuz has speculated that the eagle motif around the shield symbolizes a Prussian *Adler* or the railway society itself [Fig. 5.151]. But as Prussia no longer existed and the railway society had no unique graphical symbols, it seems more likely that the shield symbolized the German empire in its modern incarnation. Not surprisingly, the shield, which is only a few centimeters wide, is nowhere to be found in the drawings and is, as such, an exemplar of the transmutation process. While the shield could plausibly be the product of Mackensen's personal volition, it is unlikely that Mackensen would have had the desire to focus on such minute details. Thus it is probably the handiwork of a carpenter.

The Class Two stations are nominally more bespoke than their precedents in Mackensen's earlier designs. Despite their similarities, Ereğli is particularly notable as a legible composition of both the *Heimatstil* aims and a desire to contextualize [Fig. 5.152], as evidenced in the enhanced morphological unity of all its structures despite their

²³⁸ Meyer-Heinrich, *Philipp Holzmann Aktiengesellschaft*, 87.

distinct functions, including, in addition to the station buildings, workshops, and water towers, and homes for a variety of workers: the depot chief, a station master, and five mid-level engineers. As in Konya, the houses were built to serve the temporary needs of the railway's construction with no foreseeable use thereafter. They functioned largely as public showpieces, intended to present the area's impoverished residents with construction strategies alternative to their own crude vernacular construction as much as to fulfill short-term housing objectives. This explains some of the morphological unity, which is achieved through a unified setback from the street front, an identical cornice line and steep pitch in the gabled roofs, and consistent use of classicizing elements on the window frames, rather than the full rustication found on the Anatolian Railways [Fig. 5.153]. These details are evident in the engineers' domiciles at Ulukışla [Figs. 5.154-5.155] and the impressive depots elsewhere on the line, such as those at Pozantı [Figs. 5.156-5.158].

Because of myriad financial, political, and logistical challenges, the stretch of track beyond Bulgurlu was delayed until 1909. Following his appointment as the *Hochbau* director, Cuno oversaw all of the designs for the railway buildings from Holzmann's İstanbul office. The first section, reaching the peak of the mountains at Kıralan, was completed in the summer of 1911 and comprises six stations in total.²³⁹ It appears that Cuno employed Kapp von Gülstein's plans for the Ankara branch of the Anatolian Railways, for these stations include five of the Class Three typology and one of Class Four.

²³⁹ AA R12502, "Zweiter Geschäftsbericht des Verwaltungsrats der 'Gesellschaft für den Bau von Eisenbahnen in der Türkei'," September 23, 1911. Ba F / 8119, 3, [Bericht des Verwaltungsrates über das zehnte Geschäftsjahr (January 1–December 31, 1912)].

5.9.4 Durak to Fevzipaşa and İskenderun

The stretch beyond Kıralan through the Cilician Gates extending from Durak to Fevzipaşa via Adana (with an extension line to the marine connection at İskenderun) penetrates the difficult terrain of both the Taurus and the Amanus ranges. The line also presents a radical formal departure from the existing precedents. It is unclear what exactly prompted the dramatic shift in the design repertoire, but an appraisal of the archival records provides considerable insight. The stretch, directed by the head engineer Johann Lorenz Winkler (1843–1922) and the deputy engineer Foellner (the dismantler of the Aleppozimmer), had its construction center transferred to the Adana branch of the railway company (*Gesellschaft für den Bau von Eisenbahnen in der Türkei*), which was overseen by the General Director of the railway company, Riese, who employed craftsmen, masons, and carpenters of primarily Greek and Italian origins.²⁴⁰ Cuno remained the main designer of the stations, as his name appears on the drawings beneath the stamp of Holzmann's İstanbul office, yet Riese's signature also appears on the drawings for the first time, perhaps indicating a procedural alteration. The drawings for the Class Two and Three stations were completed in June 1910 and for the single Class One station at Adana sometime in 1911.²⁴¹ All were approved by Muhtar Bey for the Ministry of the Interior in March 1911, a considerable nine-month gap. Apart from a

²⁴⁰ AA Konstantinopel 271, Anders to von Bieberstein, Bagtsche January 15, 1912. GSPK, I. HA. Rep. 89. Br. 13348, Abschrift I. 27517. Hannover, September 12, 1913. Drawings for the İskenderun branch line carry the signature of Oberingenieur Hossbach.

²⁴¹ The drawings include the following: TCDD 2G-347/2; 2G-492/15; 2G-976; 10 A-5/1,2,3,4; 10 A-154/1,2,3,4,5,6; 10 A-854/1,2.

handful of stations in the difficult Amanus region, most of the stations were completed by the end of 1912.

Cuno developed three slight variations (subtypes 1–3) for the Class Three stations that appear to address small changes in the functions and climates of the various stations. The first station encountered after crossing the Taurus Range is Durak, a subtype 2 station, and a dramatic shift in the architecture parallels a radical shift in climate, flora, and fauna. Because of its particularly rural location, Durak is one of the most unchanged Class II Type 2 stations and is thus an important prototype for considering the variations and scalar shifts [Fig. 5.159]. The type comprises a two-story central building with a one-story wing sitting on an approximately 1450-square-foot footprint. The plan is divided into two parts longitudinally, with the three main spaces of the main hall, general waiting room, and *haremlik* directly off of the track side [Fig. 5.160]. Administrative spaces, including a small police office, flank these spaces while the stationmaster's house, as per the standard organization, is set on the upper level. Three large glass doors with ogee portals connect to a deep terrace that abuts the track and is subdivided by five pillars and four ogee arches [Fig. 5.161]. On the two-story side of the building, a freestanding staircase joins an outer platform to the upper-level apartment, marked with a ceremonial ogee portico [Fig. 5.162]. Wide bracket-supported eaves overhang the entire exterior perimeter, indicating the region's absence of snowfall and paying homage to the traditional Turkish projecting eave. A geometric wooden pattern, painted for embellishment, ornaments the undersides of the eaves [Fig 5.163].

Class Three Type 1 variations, as is evident in Dörtyol station, have rectangular rather than ogee portals and downplay the underside ornamentation on the eaves [Fig.

5.164], similar details being also evident in the station's depot. [**Fig. 5.165**] The sole Class Three Type 2 station, Fevzipaşa, has no terrace or portico and comprises a stone foundation, a gambrel roof on the adjunct wing, and subtler ogee arches in the fenestration [**Fig. 5.166**].

There are three Class Two stations on the Durak-Fevzipaşa stretch, important either as junctions or as termini. The station at Yenice connected the Baghdad railway to the preexisting Mersin line, while the Topprakkale station was the junction of the branch line to İskenderun. Although extant drawings identify the stations as part of a Class Two Type 2 grouping, there are significant differences between them unaccounted for by the drawing records. The typology is nevertheless largely cohesive, developing rather logically from the Class Three typology. Rather than comprising a one-story adjunct level, the main station is a single cubic two-story volume, with auxiliary loading, repair, and storage functions housed in separate buildings that include an impressive workshop [**Fig. 5.167**]. These stations have the same wide bracketed eaves and ornamentation as the Class Three stations. At the street side, a double stairway frames the main entrance and climbs to a single landing at the second level, providing access to the stationmaster's apartment. All Class Two stations also retain the Class Three stations' ogee arches. The primary differences can be seen when Yenice (1911) [**Fig. 5.168**] is compared with the identical schemes of Topprakkale and İskenderun (1913) [**Fig. 5.169**]. Yenice retains the palette of rusticated ashlar found in the lower portions of the Class Three stations, while the other two stations employ simple plaster, giving the buildings a significantly sleeker and protomodernist appearance. These stations also do not include the porticoed terrace, having a cruder wall-mounted metal overhang instead.

The Class One railway station at Adana represents the second most impressive station of the Baghdad Railway, with the possible exception of Aleppo. The plans include an illegible notation (possibly “Adana”) from November 25, 1910, following Riese’s signature issued from Frankfurt on March 14, 1911 and the final accepting signature of the Ministry of Public Works in İstanbul on May 29, 1911²⁴² [Fig. 5.170]. The station and its auxiliary buildings were completed in 1912.²⁴³ The design consists of a U-shaped building with a one-story middle section and two-story wings, laid out symmetrically on its latitudinal axis with only small differences in the partitioning of their interior spaces. The frontal façade of the middle section comprises three massive ogee arches with inset glass, the center one functioning as the entrance to the main hall [Fig. 5.171]. On the right side of the entrance are the waiting rooms and the *haremlük*, while the ticket sales and luggage handling are to the left [Fig. 5.172]. The track is accessed by ascending one of two short stairways, making this the only station on the line whose main hall is not on the same level as the track bed. The wings, which functioned as administrative spaces, contain windows with paired cusped arches with sharper attenuation. The roof is a typical saddle roof with extensive eaves.

Personal photographs from section engineer Heubusch, who resided in one of the well-appointed houses on premises reveal that the landscaping of the private gardens was entirely European in nature, replete with European garden furniture and plants and flowers indigenous to Europe. [Figs. 5.173-5.174] Yet the architecture tells a different

²⁴² Ayşe Durukan Kopuz, in her unpublished “Cumhuriyet Döneminde Mimarlık Akımları ve Adana’daki Yansımaları” (master’s thesis, Çukurova Üniversitesi Fen Bilimleri Enstitüsü, 1999), incorrectly attributed the construction of the Adana railway station to the Deutsche Orientbank. See also Yavuz, *Eine vergleichende Studie*, 167.

²⁴³ Ba R8119F/8.120 (MF 3).

story. Orientalizing details include station's ticket windows [Fig. 5.175], the wooden coffering of the eaves [Fig. 5.176], and the fountains installed on either side of the small plaza in front of the building, with their inlaid Kütahya (or Kütahya-style) tiles [Fig. 5.177]. The fountains seem particularly significant in their allusion to the wall-mounted fountains used for holy ablutions and as a general public resource in numerous Islamic buildings, including madrasas, caravanserais, and bathhouses. The stationmaster's residence [Fig. 5.178] synthesizes all of these elements in a legible, reduced package.

In general, all three station typologies are better equipped, more spacious, and more modern than their predecessors in Anatolia. This can be understood as an important consequence of the elevated standards Haydarpaşa set as a modern rail facility, as these stations were the first to be designed after Haydarpaşa's completion in 1909. The Cilician stations were also the first to be designed in the wake of the Young Turk movement and the worker's strike of 1908 and must be seen in the context of the radical shifts engendered by those events. In a memo to Winkler dated October 22, 1910, Cuno makes a passing and enigmatic mention of the changes in the *Hochbau* program, which he had been designing from his office in İstanbul:

As a result of the negotiations, where Mr. Riese was present, a whole ream of alterations to the building designs and the contract have been made.²⁴⁴

This suggests that Riese was somehow key in the changes that were made and that it was he who advocated for the Islamicizing elements.

Yavuz attributes the modifications to the fact that Cuno would have been influenced by the evolution of the First National style and may have been influenced by

²⁴⁴ Hellmuth Cuno to Philipp Holzmann, Constantinople, October 22, 1910, ISg W1/2 518: "Im Verlauf der Verhandlungen während der Anwesenheit Herrn. Reg. Rat Rieses sind eine ganze Reihe von Veränderungen an den Hochbauten und dem Vertrag vorgenommen worden."

August Carl Friedrich Jachmund²⁴⁵, in particular.²⁴⁶ But while it seems inevitable that Cuno and Jachmund would have met in the six years that they overlapped in İstanbul,²⁴⁷ that alone cannot explain the radical stylistic shifts of the Cilician stations. Jachmund's Sirkeci Station did indeed prove an important transitional moment from the formal experimentation of the historicist movements of the nineteenth century to the more selective, narrative-based objectives of the First National Movement's leading architects (Ahmed Kemalettin / "Kemalettin Bey" [1870–1927], Vedat Tek [1873–1942], Arif Hikmet Koyunoğlu [1888–1982], and Giulio Mongeri [1873–1953]), who aimed to establish an architectural movement consonant with the secularist principles of the Young Turks that would derive inspiration and forms from Ottoman motifs exclusive of their Arab, Christian, or de facto Islamic points of reference. But Jachmund's eclectic design, as has been demonstrated, does not have any direct bearing on Cuno's more synthetic designs in Cilicia and in fact stood in diametric opposition to it in its borrowing from

²⁴⁵ The surname "Jachmund" is often incorrectly reproduced as "Jasmund," although this is understandable as it was often written as such at the time, the change stemming from a transliteration incongruity from German to Turkish.

²⁴⁶ Yavuz, *Eine vergleichende Studie*, 165–66. Yavuz further contends: "Das Bahnhofsgebäude in Adana ist mit seinen Fliesentafeln, Bogenfenstern und der monumentalen Formensprache eines der schönsten Beispiele der 'Ersten National-Türkischen Architektur-Bewegung' in Adana... Es ist bekannt, dass neben den spitzbölgigen Öffnungen recht breite Wandbefestigungen mit langen Holzstützen Merkmale der 'Ersten National-Türkischen Architektur-Bewegung' sind. Der Architekt Kemelettin Bey, Schüler des preußischen Baumeisters Jasmund [sic], hat diese beiden Elemente bei seinem Bahnhofsgebäude in Edirne und vielen anderen Bauwerken verwendet" (176). (The station building in Adana is, with its tile panels, arched windows and monumental shapes, one of the finest examples of the 'First National Turkish architectural movement' in Adana... Besides the pointed arches, the rather wide eaves with long wooden supports are features of the 'First National Turkish architecture movement.' The architect Kemelettin Bey, student of the Prussian architect Jasmund [sic], has used these two elements in his station building in Edirne, and many other buildings.) However, the suggestion loses its credence when the building's authorship and the fact that Jachmund was not involved with the project are taken into account.

²⁴⁷ Mehmet Yavuz, "Mimar August Jasmund—Hakkında Bilmediklerimiz," in *Ege Üniversitesi Sanat Tarihi Dergisi* XIII, no. 1 (April, 2002), 200.

non-Ottoman, Islamic architectural motifs. To the extent that the objectives of the First National Movement were actually realizable, it is not unreasonable to see Cuno's design falling in line with many of its aims. But while one may provisionally place Cuno's design in the First National Movement category based on its many affinities, one may also note the ways in which it differs.

Cuno's design bears hallmarks of the First National Movement style in its use of the pointed arch and the wide eave, its expansion of traditional building proportions, and its use of decorative elements to codify an Ottoman context (and inevitably some Islamic context as well), including tile work and the geometric decoration beneath the wooden eave. Some preexisting Eurocentric characteristics, such as the colonnade, are embellished, while others, such as the bargeboard, are altogether eliminated. This selective process of embellishment and deletion of European norms was also rather typical for the First National style. On the flipside, Cuno's spatial configuration is not nearly as experimental as many of the most successful articulations of that style, as becomes evident when we compare, for example, Cuno's plans for the second-class stations in Cilicia (1910) [Fig. 5.179] and Ahmet Burhanettin Tamcı's (fl. 1920–1930) plan for the station at Gazi Paşa (1926) [Fig. 5.180], a suburb of Ankara.²⁴⁸ Cuno's plan retains the hierarchy established by the earlier stations, with a central hall laterally connecting to the smaller rooms adjacent to it, while Burhanettin's design for a similar-sized rail station reconfigures the plan in centripetal fashion, placing smaller clusters of rooms off a single wider hallway. Burhanettin's more elaborate, organic embellishments

²⁴⁸ Mehmet Emin Başar and Hacı Abdullah Erdoğan, "Osmanlı'dan Cumhuriyet'e Türkiye'de Tren Garları," S.Ü. Müh.-Mim. Fak. *Dergisi* 24, no. 3 (2009), 36. K. Bora Yılmazyığıt, "Ankara'da Gazi Paşa İstasyon Binası," *İstanbul Teknik Üniversitesi M.T.R.E. Bülteni* 11/12: 10–18.

are also evident in the decorative program of the exterior, with a broader palette of tiles, reliefs, arches, and inscriptions codifying its historicist posture [Fig. 5.181].

Nevertheless, although Cuno's designs in Cilicia follow a largely European spatial plan, we see that their stylistic and graphic departure may very well make them the earliest veritable crystallization of the First National style. This challenges the conventional notion that the style developed solely from the revolutionary ambitions of Ottomans, indicating that the style may have also derived from a bow to the revolution's march by the foreign architects already engaged in the Empire's modernization.²⁴⁹

5.9.5 Fevzipaşa to Nusaybin

The next division of the Baghdad Railway beyond Fevzipaşa (Division III) stretches 576 kilometers southward and eastward from İslahiye to Nusaybin. The Baghdad Railway Company appointed Foellner as its head engineer, followed by Meißner (early 1910 to May 1911), shortly after he completed his duties on the Hejaz Railway, and then the Alsatian Schröder (fl. 1905–1919) who had worked under Meißner on the Hejaz Railway.²⁵⁰ By July 1917, the railway would reach Tell Halaf, about fifty kilometers shy of Nusaybin.²⁵¹ Apart from a tunnel and viaduct near Misaka and the

²⁴⁹ Melda Araz makes a similar suggestion, but based on less context and analysis. See Melda Araz, "Impacts of Political Decisions in the Formation of Railroads and Railroad Architecture in Turkey between 1856 and 1950" (master's thesis, Middle East Technical University, Sosyal Bilimler Enstitüsü, 1995).

²⁵⁰ AA Konstantinopel 270, Kaiserlich Deutsches Konsulat in Aleppo, Aleppo May 16, 1911. See also Herbert Pönicke, *Die Hedschas und Bagdadbahn erbaut von Meißner-Pascha* (Düsseldorf: VDI Verlag, 1958), 15.

²⁵¹ Heigl, *Schotter für die Wüste*, 11.

Euphrates bridge, the engineering work was fairly simple. Cuno, who remained in charge of the architecture division of the Holzmann İstanbul office, installed the architect Kellermann in Aleppo to liaise directly with Meißner and Schröder.²⁵²

Both firsthand analysis and analysis of the extant drawings, all of which lack his signature, indicate that Cuno did not participate in the design process and instead suggest that design decisions concerning the stations and auxiliary buildings were made in situ, on an ad hoc basis. The probability that these were ad hoc is also suggested by the particular conditions of the area and the period in which the stations were realized. The terrain was significantly less fertile, and the area had a vernacular building tradition consisting primarily of stone rather than wood.²⁵³ This section of the railway also marked the transition into a predominantly Arab area that was fraught on its eastern edge with the perils of marauding Bedouin tribes, so that design strategies were born of the necessary security precautions. Chronologically, the latter stages of this section's construction coincided with the beginning of the Great War, which further complicated the administrative and human resource aspects of the construction and implicate the intertangling of political events in the transmutation process. Finally, the rapid personnel shifts between Foellner, Meißner, Schröder, and Kellermann rendered any concern for typological visual continuity virtually null. For the most part, the several dozen stations constructed on the route followed an extremely pared-down program, with residual

²⁵² AA Konstantinopel 271, Kaiserlich Deutsches Konsulat in Aleppo, Aleppo April 13, 1912.

²⁵³ A discussion highlighting some of the broadest differences between Arab and Anatolian urban forms appears in Nezar AlSayyad, *Cities and Caliphs: On the Genesis of Arab Muslim Urbanism* (Westport, CT: Praeger, 1991).

influences of an array of precedents from earlier stations and design strategies evident only in a collagelike fashion.

While this section of the railway does follow the three class structure, this connotes more of a general hierarchy of importance than it does any typological continuity—and thus the stations are notable as syncretic and atypological stand-alone entities. Apart from Aleppo, the sole Class One station, and Akçakale, the sole Class Two station, the remaining stations were designated as Class Three stations.²⁵⁴

The stations at Nusaybin [Fig. 5.182] and Carchemish [Figs. 5.183-5.184] both referenced a *Wohnhaus* (an architectural structure mimicking a freestanding vernacular German house) typology, but they demonstrate the full range of the section's varied architectural ambition, from Nusaybin's ad hoc nature to the highly original compositional qualities of Carchemish.²⁵⁵ Built during the war around 1916, Nusaybin completely abandons ornament and ambition, having instead a one-story layout, rectilinear fenestration, and a simple plan. On the other hand, Carchemish demonstrates a highly original and self-referential fusion of its precedents. The station was opened in September 1912, roughly the same time as the branch line to İskenderun. Its rectilinear volume, plan, and façade organization are almost direct replicas of the Class Two Type Two stations at İskenderun and Topprakkale, merely reduced slightly in scale. Rather than plastered brick, however, the building is constructed from chunky blocks of lime quarried eighty kilometers to the west and left raw and unfinished.²⁵⁶ Additional changes

²⁵⁴ Yavuz, *Eine vergleichende Studie*, 183.

²⁵⁵ Ibid., 185–186.

²⁵⁶ Ibid.

include rectangular fenestration and rounded doorframe tops. The main entrance portal has a unique voussoir composition with alternating light and dark stones reminiscent of Mamluk portals. The design of the Carchemish station eliminates the wide overhanging eaves and the portico.

The Class Two station at Akçakale (Tell al Abyad) represents another considerable adaptation [Fig. 5.185]. Likely designed by Kellerman in consultation with Cuno around 1912, the one-story railway station comprises a dense rectangular plan sheltering two courtyards [Fig. 5.186]. Only the extreme edge houses railway functions, all directly accessible through doors leading to the track, marking the abandonment of a scheme based on centralized organization. Rather, the plan emphasizes the railway's consonance with military functions, as flushing the railway programs to the building's edge (small apartments for railway workers were planned on the edges directly perpendicular to the station façade) allowed using the rest of the building for military functions, including storage for weapons, barracks, offices, and training facilities. The first courtyard appears to have been designated for railway operations and personnel, while the second was primarily for military operations and personnel. The two are connected through a middle wing with an open passage and a water station, another unique feature. The first courtyard has a well for collecting water to be stored in the so-called water house. These features all indicate that the Akçakale station was intended as a quasi-autonomous complex for a consortium of railway and military personnel, a conclusion also supported by the small barred windows, the metal doors [Fig. 5.187], and the streamlined, unornamented treatment of the façades.

The design at Akçakale and the diversification of its program directly echo the generally insular strategies of the vast majority of the stations of the Hejaz Railway and thus also suggest the possible involvement of Meißner, despite the fact that he had formally left Aleppo for the Baghdad post prior to the station's construction. However, it is probable that he would have informed Kellermann of his previous designs and general strategies for more difficult locales, perhaps giving him Hejaz Railway plans as documents to reference. It should be added that the design also makes one of the clearest references to the traditional spatial organization of the caravanserai in its use of the courtyard as the central space for an array of surrounding cellular spatial units.

5.9.6 Aleppo

The railway station at Aleppo²⁵⁷ demonstrates morphological adaptations to the Cilician station model similar to those at Carchemish, but on a considerably grander scale²⁵⁸ [Fig. 5.188]. The Aleppo station involved one of the politically trickiest acquisitions of land on the entire railway, which ultimately led to the station's establishment on a difficult hilly site in the leafy western suburb of al Azizieh.²⁵⁹ Despite

²⁵⁷ This is, unfortunately, one of the major locations that I was unable to visit while writing this dissertation because of the ongoing civil war.

²⁵⁸ Zeynep Çelik contends that the Aleppo station had an "Anatolian touch," which is partially true because its tripartite form and wide eaves are similar to the Cilician stations, particularly those of Adana station. However, major differences are also immediately noticeable, including the rough-hewn stonework of the exterior, which is, if anything, more in tune with the region's vernacular stone construction. Çelik, *Empire, Architecture, and the City*, 41.

²⁵⁹ AA R 13499 Kaiserlich Deutsche Botschaft in Aleppo, Nr. 20, Aleppo, February 8, 1911; AA R 13502 "Zweiter Geschäfts des Verwaltungsrat der 'Gesellschaft für den Bau von Eisenbahn[en]"

the challenges posed by the site, Meißner and the other engineers also enjoyed certain advantages working in Aleppo, including the ability to ship materials directly to the site via the French-operated railway line to Damascus, the availability of a considerable Italian workforce for masonry and earthworks,²⁶⁰ and security and administrative support afforded by the presence of a German consulate within the city.²⁶¹ Like other Class One stations, Aleppo comprised a campus of workshops, workhouses, and domiciles for station workers. Construction on these auxiliary structures began in September 1911 but met intermittent delays caused by political and financial problems²⁶² [Fig. 5.189]. Work was ultimately completed in 1912.

The station's composition includes a two-story central unit connected to two other two-story units at either longitudinal end through one-story connecting units. The exterior is clad, like Carchemish, in lime likely quarried from Akterin²⁶³, which was laid atop a basalt foundation. The interior of the middle section [Fig. 5.190], which functions as the main reception hall, is outfitted in an array of marble and wood, ably articulating its geometric program with a cream-brown-black color scheme. Cartouches, ogee arches, and wide bracketed eaves with profiles similar to those in the Cilician stations are the

in der Türkei',” September 23, 1911; AA Konstantinopel 270 Kaiserlich Deutsche Botschaft in Aleppo, Aleppo, May 16, 1911.

²⁶⁰ AA Konstantinopel 270 Kaiserlich Deutsche Botschaft in Aleppo, Aleppo, September 22, 1911. It seems probable that these workers included at least some who were no longer engaged with the Anatolian portions of the Baghdad Railway.

²⁶¹ AA Konstantinopel 270 Kaiserlich Deutsche Botschaft in Aleppo, Aleppo, September 22, 1911.

²⁶² Moritz Hecker, “Die Eisenbahnen der asiatischen Türkei,” in *Archiv für Eisenbahnwesen* (Berlin: Königlich Preußischen Ministerium der Öffentlichen Arbeiten, 1914), 1582–83.

²⁶³ Yavuz, *Eine vergleichende Studie*, 185. This is suggested by the similarity in the stones' color and hue.

most obvious signifiers of the railway's formal continuity.²⁶⁴ Waiting rooms, one for first- and second-class passengers and one for third-class passengers, are housed in one of the wings, while facilities for baggage and service are in the other. At the far ends reside a restaurant and a telegraph room and post office; this is the only station apart from Haydarpaşa to have such functions. Upper levels were used for apartments and, perhaps occasionally, offices. Instead of a portico, the track side [Fig. 5.191] has a simple wall-mounted awning. The detailing of the station's fenestration is the most revealing component to the effects of local transmutation, digressing as it does from the idiom established in Cilicia in favor of stone carving that is a blend of Persianate, Turkish and Arab motifs. [Fig. 5.192]

Given the proportional similarities between the Aleppo station and the Cilician stations, it is likely that Cuno took a more active role in the design of this station than he did in others along the stretch. It is also likely that the important changes—the use of limestone, the five-unit composition, and the interior decorative scheme—were at least in part due to Meißner, who may have suggested using some of the same building materials used for the Hejaz Railway, which would be “appropriate” since Aleppo was the Baghdad Railway's first station in a predominantly Arab part of the empire.

²⁶⁴ It seems unlikely that a small fountain currently at the center of the reception hall was part of the original design.

5.9.7 Irak Vilayets

There are virtually no records of the railway stations built in Iraq under the German direction because of a combination of adverse conditions, including the fact that these were the last stations to be planned and built—mainly during wartime and, by all accounts, hastily—and virtually all were destroyed and/or rebuilt (under British or Iraqi leadership or elsewhere in Iraq’s tumultuous twentieth- and twenty-first-century history).²⁶⁵ As a result, there are no drawings at all and a striking dearth of photographic material. A handful of British sources provide the best information.

The richest accounts come from the memoirs and photographs of Gertrude Bell, who, along with some photojournalists, visited Meißner at the Baghdad station in March 1914 and documented the environs in photographs [Figs. 5.193-5.194]. According to Bell, the Baghdad terminus and its facilities appeared to be “the only thing that looks like [it is] going forward instead of round and round,”²⁶⁶ which, when cross-referenced with her photos and a postcard [Fig. 5.195], seems an apt description. The station’s appearance was a radical departure from both its peers in Anatolia as well as Meißner’s stations in the Hejaz. The buildings appear to be made from a square-paneled half-timbered grid infilled with brick, not dissimilar to the vernacular *Fachhallenhaus* (Low German house, a type of German farmhouse) style of Medieval construction common to

²⁶⁵ As the railways in the former Irak vilayets were left unfinished at the end of World War I, British-conducted surveys of the condition of the rail shortly thereafter are useful in piecing together the state of the railway c. 1919. For the history of the Iraq Railways, see *A History of the Mesopotamian Railways During the War* (Baghdad: Government Central Press, 1921).

²⁶⁶ NUSC Gertrude Bell diaries, March 26, 1914.

the North German Plain, the Lower Rhine, and Mecklenburg.²⁶⁷ The timber frame reveals an open clerestory under a steeply pitched roof, which along with the siding of the doors appears to be made of industrial grade corrugated tin or steel.²⁶⁸

Unique for the railway, the facilities at Baghdad indicate a striking apathy towards ornamentation and the signification of the railway's geopolitical, cultural, and economic relevance through architecture. Meißner's approach appears to be premised far more on utility and pragmatism, elegantly expressed through the facilities' channeling of vernacular architecture. Extant war-era images of other stations in Iraq reveal an unsystematic construction. In Samarra [Fig. 5.196], the main station appears to emulate Cuno's Class Two station model in Cilicia whereas the station in Mosul, appears similar to the railway's very simple Class Three, Section III stations [Fig. 5.197].

Indeed, it appears that by wartime, systematic design programs such as Cuno's in Cilicia were a luxury that could not be accommodated. Archival sources reveal that amidst the mad dash to finish the railway as quickly as possible, Eugen Rückgauer (b. 1870), a Holzmann architect who joined the Baghdad railway construction efforts in its eleventh hour, did the unprecedented: he contracted out the design and construction of two stations in the Taurus range to Ferdinand Grages (1869–1951), a Holzmann engineer who had participated in the construction of the Tanzanian railways.²⁶⁹ The stations—

²⁶⁷ See, for example, Karl Baumgarten, *Das deutsche Bauernhaus, eine Einführung in seine Geschichte vom 9. bis zum 19. Jh.* (Berlin: Karl Wachholz Verlag, 1980).

²⁶⁸ The images and texts do not reveal any details of the construction of the residences built for the terminus.

²⁶⁹ "Bauvertrag," September 15, 1916, ISg W1/2 518. Grages was later employed full-time by Holzmann and placed on its oversight committee (*Aufsichtsrat*). See Pohl, *Philipp Holzmann*, 86, 157.

Kıralan (Hacııırı) and Karapınar—demonstrate a simple functionalism that fulfills the railway company’s desire to execute the remaining *Hochbau* projects in, in their words, as “easy” a way as possible, sparing any and all architectural ambition in the process.²⁷⁰

5. 10 Of Monuments and Missions: Architectural Affiliates

5.10.1 Strategies, Tactics, and Symbolism in an Architectural Constellation

Although not part of its comprehensive and systematic architectural network, a once-removed wealth of monuments, architectural projects, and public symbols spawned by the railway’s genesis attempted to convey its technological, geopolitical, and human importance to as wide an audience as possible. Unlike the railway stations and structures, these artifacts express the vested interests of individual agents—local patrons, the Sultan, the Kaiser, and financial institutions, among others. As such, they present the clearest articulations of the architectural and artistic ambitions of specific partners in the railway’s overall development and comprise a large portion of the railway network’s most singularly expressive moments. Unsurprisingly, the ability to erect monuments, civic structures, and even colonies was the province of the powerful, the rich, and influential, and these artifacts retransmit this power through the lens of the railway. This is the enunciation of strategy in stone and gilding. But wider and closer inspection also reveals enunciations of bottom-up action, humble expressions from some of the railway’s least

²⁷⁰ “Bauvertrag”, September 15, 1916, ISg W1/2 518, 12. See also “Baubeschreibung,” September 6, 1916, ISg W1/2 518.

enfranchised parties—such as its laborers—to commemorate, for example, the loss of a fallen colleague, to build a playground for workers’ children where playgrounds did not exist, or to appropriate a locomotive as a moving mosque so that a worshipper moving through the Hejaz could maintain contact with the qibla. It is noteworthy that the freestanding monuments constructed in tandem with the railway represent its extremes—its most and least enfranchised agents, its most expensive and most improvisational construction—and thus help expand the artistic and architectural program of the railway beyond the bureaucratic and technocentric circumscription of the railway engineers and administrators and their station buildings.

The erection of monuments in the nineteenth-century Ottoman empire was mired in conflicting interests. Their erection clearly echoed the Western urbanistic and ceremonial emulated by the Tanzimat reforms and indicated by the wave of Western and non-Muslim practitioners of all forms of urban renovation, including monuments. But it ran counter to the entrenched perception that stones, and certainly not figurative ones, were not to be venerated or in any way emphasized if they were profane (indeed, up until the republican period, there had been no figurative statuary anywhere in the empire²⁷¹). As a consequence, there was a continually evolving negotiation of what constituted a dignified civic monument in line with Tanzimat principles and what constituted something that was inappropriate or unmindful of religious piety. The negotiation was largely the task of foreign and/or non-Muslim architects and artisans, and much can be

²⁷¹ Klaus Kreiser, “Public Monuments in Turkey and Egypt, 1840–1916,” *Muqarnas* 14 (1997): 103–114. Of the republican period, Kreiser notes: “Setting up statues as historical monuments was, so far as Mustafa Kemal was concerned, no longer a subject of dispute in the Islamic world” (114). He also cites Mustafa Kemal as saying, “A nation that ignores painting, a nation that ignores statues, and a nation that does not know the laws of positive science does not deserve to take its place on the road to progress” (114).

inferred from close readings of both their design process and the monuments themselves about how this negotiation trod the fine line that represented, in stone, the core tension between Tanzimat ideology and religiosity in the civic realm.

5.10.2 The German Fountain

The so-called German Fountain (*Alman Çeşmesi*) in Istanbul is the most visible commemorative monument of the unique German-Ottoman partnership. While relatively demure in size, the fountain derives its prominence from its strategic location at the northern end of the Hippodrome, adjacent to the Mausoleum of Sultan Ahmed I and within the sight lines of the Sultan Ahmed Mosque, Hagia Sophia, and all of the other Byzantine and Ottoman monuments that demarcate the gravitational center of İstanbul's history. It is also noteworthy that the fountain stands approximately on the site of the famed *Vakvak ağacı* (Vakvak tree), where a number of officials of the court of Mehmed IV (r. 1648–1687) were decapitated during the janissary rebellion of 1656. The victims' heads were hung from the tree, connoting the image of the *Secere-i Vakvak*, a tree in hell (*cehennem*) whose fruits are human heads²⁷² [Fig. 5.198].

Upon returning to Berlin from his *Orientreise* of 1898, Wilhelm summoned the trusted and high-ranking state architect Max Spitta (1842–1902), apparently made a quick sketch of a fountain to be given as a memento to the Sultan, and asked Spitta to develop

²⁷² İlhan Başgöz and Kemal Sılay, *Turkish Folklore and Oral Literature: Selected Essays of İlhan Başgöz* (Bloomington: Indiana University Press, 1998), 298; Afife Batur, "Alman Çeşmesi," in *Dünden Bugüne İstanbul Ansiklopedisi*, vol. 1 (İstanbul: Kültür Bakanlığı ve Tarih Vakfı, 1993), 208–209; Alper Çeker, *İstanbul mevlevihaneleri* (İstanbul: Kültür A.Ş., 2010), 196.

and execute it.²⁷³ Apparently, Wilhelm had been intrigued by the fountain's double function in Islamic society as both a benevolent civic service and a facilitator of the customs of worship. The project was a unique one for Spitta, who apart from a management role in the construction of the famed (and widely derided) *Siegesallee*,²⁷⁴ had spent his entire career as an architect of sacral buildings, designing a wide range of prominent historicist churches in Berlin as well as the well-known Erlöserkirche in Bad Homburg (design, 1907).

Spitta's designs went through several iterations before Wilhelm found them satisfactory. The first [Fig. 5.199] consists of a covered octagonal pavilion constructed of medium-sized ashlar, with stout Byzantine-style columns of black marble and thickly framed, rounded arches. An upper band contains triangular pediments punctured by three similarly proportioned miniature projecting portals, a larger one in the center and two smaller ones on either side. Beneath, a heraldic shield depicts the *Bundesadler* (German coat of arms bearing an eagle) on two sections and the *tuğra* on a third. Above, the cornice line is rendered in relief and at each corner supports a small entablature that also depicts the *Bundesadler*. The roof rises to a circular top that serves as the pedestal for an

²⁷³ Gudrun Gorka-Reimus, Jürgen Luh, and Susanne Evers, *Der Traum vom Orient: Kaiser Wilhelm II. im Osmanischen Reich* (Berlin: Stiftung Preußische Schlösser und Gärten Berlin-Brandenburg, 2005), 45.

Afife Batur ("Alman Çeşmesi," 208–9) writes that the fountain was constructed in situ by a German architect named Schoele, with the architects Carlitzik (German) and Joseph Anthony (Italian) also working on the project. This information is not confirmed elsewhere.

²⁷⁴ This project chronicles Kaiser Wilhelm II's fascination with Romanesque architecture and its variants. The press and even the Empress disliked the project. See Uta Lehnert, *Der Kaiser und die Siegesallee: Réclame Royale* (Berlin: Reimer, 1998); Helmut Scharf, *Zum Stolz der Nation: Deutsche Denkmäler des 19. Jahrhunderts* (Dortmund: Harenberg, 1983), 59; "Spitta, Max," in *Allgemeines Lexikon der Bildenden Künstler von der Antike bis zur Gegenwart*, eds. Ulrich Thieme and Felix Becker, vol. 31 (Leipzig: E.A. Seemann, 1937).

oversized rendition of the German imperial crown. A second sectional drawing [Fig. 5.200] illustrates the ornamental scheme of the fountain's interior, which, while not depicting a water source, shows a brown-blue-yellow scheme of decorative dots that appear to indicate a mosaic.

A second design [Fig. 5.201], rendered only in pencil, alters the previous design by subdividing the large arches into two smaller ones. Here the *Bundesadler* has been removed, perhaps because the figural motif was seen as problematic for the context. The upper pediment band is eliminated in favor of a simpler row of miniature arches, seven on each face. The roof is rounded and somewhat squatter, and culminates with a small crown-like cap resting on a circle of small columns.

A third design [Fig. 5.202] modifies this scheme slightly, placing a rosette between the paired columns and the apex of the larger column of each face. It also articulates the fountain program explicitly with an elevation and a plan. A large fountain rests at the center of the interior platform, which is accessed from ground level by ascending eleven stairs. On the exterior, fountains are embedded on the sides of each face of the perimeter save for the face with the stairs, creating a circumference with seven fountains in total.

A fourth design [Fig. 5.203] removes the upper band altogether, extending the length of the columns significantly and changing their proportioning through the use of wide rounded arches with pronounced voussoirs and decoratively carved Byzantine-style capitals. A round motif marks the apex of each arch and rests under a light cornice line supporting a semi-spherical dome with external banding. The roof culminates at a small

base with a motif that appears to be a hybrid of a *fleur de lis* rendered in three dimensions and a typical finial.

The fifth design, relatively similar to the fourth, is the realized project; it comprises three drawings and a photograph of a model. An elevation [Fig. 5.204] indicates the presence of a new, lower decorative band on the perimeter, directly above the fountains on each face. The band contains a circular emblem that alternates between the *tuğra* and a crowned “W”, Wilhelm’s imperial monogram. It is noteworthy that, with the stairs leaving one less face for the octagonal structure, it is the imperial *tuğra* that has four occurrences, in contrast to the Kaiser’s three. The structure in the interior is no longer a prototypical fountain but rather a large elevated mound that allows water to slowly trickle downward from its top. The roof is rendered as copper plates, confirmed by the roof’s appearance in the photograph of the model [Fig. 5.205], and is set in scale by the presence of a figurine wearing a fez, perhaps the Sultan himself. The finial is a simple cone-shaped bulb. One structural section [Fig. 5.206] indicates the decorative scheme of the dome, which again depicts alternating German and Ottoman emblems. The drawing and another section [Fig. 5.207] show a half-story beneath the main platform level and indicate a narrowing of the fountain base from semi-circular to semi-ovular. The lush marble and porphyry columns of the realized project belie their flat feel in the drawings.

The fountain was constructed as a prefabricated kit of parts under the direction of Spitta in Berlin and shipped to İstanbul via Hamburg, arriving sometime in late 1900 [Figs. 5.208-5.209]. The erection of the fountain was supposed to have been completed before September 1, 1900, to celebrate the 25th anniversary of Abdülhamid’s ascension

to the throne, but the shipping and logistical issues upset the schedule and the fountain was eventually inaugurated on January 27, 1901, to a great deal of fanfare.²⁷⁵ [Fig. 5.210]

The fountain contains a highly codified program of symbols and inscriptions, the most important example being a German language plaque [Fig. 5.211] that is installed on the easterly side of the fountain and carries these words:

KAISER STIFTETE DIESEN BRUNNEN IN DANKBARER ERINNERUNG AN
SEINEN BESUCH BEI SEINER MAJESTAET [sic] DEM KAISER DER OSMANEN
ABDUL HAMID II [sic] IM HERBST DES JAHRES 1898.

(THE KAISER DONATED THIS FOUNTAIN IN GRATEFUL MEMORY OF HIS
VISIT TO HIS MAJESTY OF THE OTTOMAN EMPIRE ABDUL HAMID [sic] II IN
THE AUTUMN OF THE YEAR 1898.)

The interior of the dome is best understood in situ, a rich mosaic in a lively array of green, blue, and red units on a primarily golden background, executed by the mosaic artist August Oetken (1868–1951) [Fig. 5.212]. Above the archways, Oetken installed an undulating ribbon relaying an eight-couplet poem by Ahmet Muhtar Bey, Seraskery's undersecretary, with epigraphy by Hattat İzzet Efendi (1841–1903), both commemorating the fountain's construction²⁷⁶ [Figs. 5.213].

As a complete work, the fountain is more a “Byzantinizing Neo-Renaissance” effort than it is strictly a Neo-Byzantine effort, as some have called it.²⁷⁷ Nonetheless, it is instructive to consider the development of the project, with its five iterations,

²⁷⁵ Batur, “Alman Çeşmesi,” 208-9.

²⁷⁶ Ibid.; Gorka-Reimus, Luh, and Evers, *Der Traum vom Orient*, 45.

²⁷⁷ I borrow the fitting description “Byzantinizing Neo-Renaissance” from Gülru Necipoğlu, “Creation of a National Genius,” 151. Necipoğlu notes that an image of the fountain was used as the terminal piece in the first major European study to recognize the value of Turkish architecture: Cornelius Gurlitt, *Die Baukunst Konstantinopels*, 2 vols. (Berlin, 1907). Gurlitt received special permission from the Porte to survey and draw the monuments of İstanbul with the assistance of Adolf Marschall von Bieberstein (1842–1912), the German ambassador to the Ottoman empire.

inscriptions, and ornamental program, through the lens of Spitta's career, which in high historicist fashion melded elements of Gothic, Romanesque, and Byzantine architecture in various measures and with numerous twists—for here it becomes clear that the fountain's designer wrestled with a number of the ideological issues at the fulcrum of style and nationalism. The development of Spitta's design articulates a clear trajectory from a German nationalist bravura to an architectural treatise on geopolitical equanimity, as evidenced by the alternating medallions. This equanimity is further supported by the Byzantine motifs that Spitta brought to the fore, with the potential to symbolize the fundamentals of Ottoman Islamic architecture while referencing Hagia Sophia, standing only yards away, as well as the Christian-Byzantine imperial heritage, which at the time of Justinian extended to the borders of German-speaking Europe.²⁷⁸ The stylistic choice and its execution, enhanced by the ornamental program and the iterative design process, form a narrative in stone and marble that genuinely tries to stress the cultural parity of the German and Ottoman empires.²⁷⁹ What remains uncertain, indeed unascertainable, is whether Wilhelm and Spitta employed these choices through the prism of geostrategy, cosmopolitanism, or some combination of the two. A cartoon published in *Kalem* in 1908 indicates that at least some in the Ottoman community understood the quasi-colonial symbolism of the fountain²⁸⁰ [Fig. 5.214]. In the image, a tree, presumably the *Vakvak*

²⁷⁸ The Hagia Sophia had been a leitmotif of cultural symbolism in architecture across cultures. See reflections on this legacy in Robert Mark, Ahmet S. Çakmak, *The Hagia Sophia: From the Age of Justinian to the Present* (Cambridge: Cambridge University Press, 1992).

²⁷⁹ Christensen, "The Eurasian Hour."

²⁸⁰ Illustration entitled "Un exemple de la loi d'évolution," *Kalem* (December 3, 1908) [volume information omitted], as noted in Tobias Heinzelmänni "Osmanlı Karikatürlerinde Almanya'nın 'Gezgin Kayzeri'," in *Boğaziçi'ndeki Almanya: Alman İmparatorluğu Sefaret Köşkü'nün 130*

ağacı, is depicted steadily growing and encircling the fountain, ultimately dismembering its top section from its bottom section and allegorizing it as a potential victim of an “organic” rebellion, as had existed on the site in 1656.

5.10.3 Strategic Monuments: Kütahya, Konya, Damascus, Haifa

While the imperial taste for commemorative public monuments accelerated in İstanbul throughout the nineteenth century and into the twentieth, the program also extended to regional centers. Four cities—Kütahya, Haifa, Damascus, and Konya—contain prominent monuments that celebrate the triumphal construction of the Ottoman railway network, either explicitly or through their references to the modernity and economic productivity that came with it. While infrastructural improvements such as parks, street furniture, public lighting, and fountains had already begun to recast provincial centers in a modern image, monuments represented a particularly bombastic addition to the public sphere, as they did not have a civilizing function per se—unlike other modernizing interventions that were tangibly beneficial for public health, leisure, and safety.

Despite the avoidance of figural statuary, two monuments celebrating the railway and its achievements follow a typical Western format: a slender vertical form atop a pedestal. The first example is a monument commemorating the March 1902 transfer of

Yılı—Almanya Sefareti Tarabya Yazlık Rezidansı'nın 120 Yılı, ed. Matthias von Kummer (İstanbul: Zero Prod. Ltd. Şti., 2010), 240.

the Haifa-Daara Railway into Ottoman hands²⁸¹ [Fig. 5.215]. The monument sits adjacent to the Haifa terminus site and comprises a tightly packed grouping of fluted Ionian columns supporting a square entablature and architrave. Atop the entablature sit four spheres that in turn support a fifth sphere, bedecked in a floral wreath and supporting a crescent. The street face of the statue's pedestal depicts a steam locomotive, while the adjacent sides depict winged wheels and a bolt of electricity, graphic motifs that had been used for railway ephemera such as tickets and schedules. The imperial *tuğra* appears throughout the monument, and an inscription on the upper section of the pedestral reads:

Our lord and master... Abdülhamid... has commanded the construction of a railway line from Damascus to facilitate for the nation of Muhammad the pilgrimage to the house of God.... The Sultan then gave his grand command, may God lengthen his rule, that a railway line should be laid from Haifa to connect with the Hamidiyya Hijaz line. Therefore it is the duty of every Muslim who made his pilgrimage to the house of God and availed himself of the visit to the grave of the Prophet to pray to God to support the Sultan's Grand Caliphate and to raise his high hand over the heads of the people. Inscribed in 1319 / 20 April [April 9, 1902].²⁸²

Although the architect of the monument is not known, the classicizing elements indicate that it was probably not an Ottoman designer, while the fluency with the visual motifs of the Hejaz railway and the integral use of both Ottoman Turkish and the *tuğra* indicate that it was most likely an architect who had a rapport with imperial norms and the contemporary graphic identity of the railway network.

The provenance of the vertical monument commemorating railway construction in Damascus is more complete. Raimondo Tommaso D'Aronco (1857-1932), an Italian

²⁸¹ Gülsoy, *Hicaz Demiryolu*, 130; Kushner, "The Haifa Damascus Railway," 193–213. See also Kreiser, "Public Monuments," 110.

²⁸² This is the translation by Kreiser. Kreiser, "Public Monuments," 110.

architect who had lived in Istanbul since 1893²⁸³ and who received considerable acclaim for his Art Nouveau inflections in Ottoman architecture, was charged by the Sultan to construct a monument to be placed in al Marjeh Square in Damascus, due northeast from Qanawat station. It would commemorate both the initiation of the construction of the Hejaz Railway and the completion of the telegraph line built in conjunction with it. D'Aronco's design breaks from all norms in its considerably modern Art Nouveau styling, which changed significantly from an earlier iteration that comprised an obelisk on a pedestal with bracketed eaves and four faces with small fountains [Fig. 5.216]. The final design [Fig. 5.217], completed c. 1900, is an elegant nonclassicized bulbous column festooned with faux telegraph wires. Atop the capital, which bears the imperial *tuğra*, a most unexpected object appears [Fig. 5.218]: a scalar replica of Sarkis Balyan's (1835–1899) mosque at Yıldız [Fig. 5.219], completed in 1886, commemorating the modern caliph and his modern building program in a highly unusual mix of sacral and profane. D'Aronco's use of the architecture instead of a figurative sculpture is also unique, indicating that even representations of architecture could play a primary role in signifying imperial and caliphal power, as much as, if not more than, figural statuary.

In Kütahya, the arrival of the railway in 1896 spelled prosperity more than anything else, allowing the small village with its famed tradition of ceramic tile production to reach large imperial and even international markets with greater ease.²⁸⁴

²⁸³ Ibid., 111. D'Aronco was initially invited to İstanbul by Abdülhamid II to organize an imperial exhibition and wound up staying for the vast balance of his career.

²⁸⁴ It has been noted that the period spanning the last quarter of the nineteenth century through the early twentieth century witnessed a minor revival in the production of tiles in Kütahya, which I wish to suggest was directly related to the railway, or at least the anticipation of it, and the greater economic activity in the region. Jonathan M. Bloom and Sheila Blair have derided the quality of these tiles, primarily for their derivative “eclectic” appropriations of earlier styles, in *The Grove*

Clock towers, like monuments, also proliferated in the Hamdian error, another telltale indicator of modernization's creeping psychic and symbolic grip on the public sphere.²⁸⁵ The dogged keeping of time in everyday life, apart from recognizing the times of prayer, was largely a Western convention, but the railway with its fixed schedules and swift pace necessitated it. Kütahya Governor Ahmed Fuat Pasha (governed 1893–1908) initiated the construction of a clock tower in the city's central square to publicly assert his embrace of the city's industrial transformation, anticipating the railway's arrival in the region and marking it accordingly [Fig. 5.220]. The Kütahya clock tower, erected in 1881, consists of three stacked rectangular masses of roughly equal size, the bottom with a door on one side and windows on the others, the middle with windows on all sides, and the top with smaller windows and clocks above them. The tower combines relatively unornamented ogee and rounded arches with accents of inlaid Kütahya tiles and is topped by an octagonal bronze cap extending beyond the volume of the tower and appearing to float above it. The entire tower is set on a platform five steps above street level.

As Zeynep Çelik has documented, the journal *Malumat* published the design for a clock tower commemorating the beginning of construction of the Hejaz Railway on its

Encyclopedia of Islamic Art and Architecture, vol. 3 (Oxford: Oxford University Press, 2009), 474. Also see Rifat Çini, *Kütahya in Turkish Tile Making* (İstanbul: Uyan Yayınları, 1991). Bloom and Blair's dismissal of the tiles implicates Ottoman modernization and European transmutation in a larger process of sullyng the (perceived) purity of the arts of Islam more widely, an implication counter to the thesis of this study.

²⁸⁵ For an excellent account of the cult of time, including clock towers, under Abdülhamid II, see Mehmet Bengü Uluengin, "Secularizing Anatolia Tick by Tick: Clock Towers in the Ottoman Empire and Turkish Republic," *International Journal of Middle Eastern Studies* 42 (2010): 17–26. See also Avner Wishnitzer, "A Comment on Mehmet Bengü Uluengin, 'Secularizing Anatolia Tick by Tick: Clock Towers in the Ottoman Empire and Turkish Republic'," *International Journal of Middle Eastern Studies* 42 (2010): 537–45.

cover in 1902.²⁸⁶ [Fig. 5.221] Both the designer and location for the clock tower are unknown, but Çelik has speculated that, given its scale and high level of ornamentation that it was most probably conceived for İstanbul as a sort of reminder of the consolidation (or colonization) of the Arab provinces. The composition, an amalgamation of a *sebil* (fountain kiosk) and clock tower, both tinged with Islamic references, melded the distinctly modern typology of the clock tower with a traditional Ottoman structure, projecting the simultaneity of modernization and tradition in the Hamidian era.

A particularly unusual monument was erected in Konya in 1916 by the Ottoman architect Muzaffer Bey (1881–1920)²⁸⁷, to commemorate the agricultural innovation in the region and province, in large part thanks to the German railway intervention and the irrigation of the Konya Plain [Fig. 5.222]. The monument, resting on a platform at an important traffic juncture of Ferit Paşa Caddesi and Sait Paşa Sokak, consists of four broad faces containing pointed and crenellated portals with muqarnas detailing. At the corners are bulb motifs that have been linked to Rumi designs associated with the city.²⁸⁸ The roofline of the main section bears a distinct sinusoidal tent-like profile, common to numerous Classical-era Ottoman portals.²⁸⁹ Of note is that Muzaffer Bey's design makes

²⁸⁶ Çelik, *Empire, Architecture and the City*, 148-50.

²⁸⁷ Erdem Yücel, "Mimar Muzaffer '1881–1920'," *Bizim Anadolu*, September 4, 1971, 6.

²⁸⁸ Osman Nuri Dülgerler and Tülay Karadayı Yenice, "Türklerde Anıt Mimarisinin Bir Örneği: Konya Atatürk Anıtı" (research paper, Şelcuk Üniversitesi, Konya), accessed September 16, 2013, <http://www.mmf.selcuk.edu.tr/mmfdergi/upload/sayi/33/95/67-78.htm>.

²⁸⁹ Kreiser, "Public Monuments," 113–14. Just ten years after its completion, the statue was reappropriated as a monument to Mustafa Kemal Atatürk, with a massive statue of the Republican leader designed by the German sculptor Heinrich Krippel (1883-1945) placed on top, affirming the secular, positivist acceptance of figural sculpture.

no reference to agricultural motifs such as the wheat and grain produced by the region as a result of the German canalization project.

5.10.4 Tactical Monuments: The Taurus Mountains

While the monuments discussed in the previous section celebrated the achievements of the railway and its attendant modernity, a spate of monuments hidden far from the urban public's view memorialize a darker aspect of the railway's construction: the considerable number of people who perished constructing it. The most perilous section of the railway network's construction, at least for Germans, appears to have been the Taurus mountain section of the Baghdad Railway. The workers' colony at Belededik [Fig. 5.223], now in a state of ruination [Fig. 5.224], reveals other interesting "archaeological" transmutations including the appearance of steel rails, used similarly for building construction purposes as they were in Konya, but in this instance with inscription "A.H.V." instead of "Krupp" indicating a different manufacturer—Altos Hornos de Vizcaya—a Spanish steel manufacturer [Fig. 5.225]. The reasons for this change are unknown.

In the far northeast of Mersin province, about halfway between the villages of Gülek and Çamalan and a few miles away from the workers' colony of Belededik, stands a monument memorializing the lives of forty-one German nationals who perished during the construction of the Baghdad Railway²⁹⁰ [Fig. 5.226]. The monument rests atop a bluff

²⁹⁰ Names listed on the upper portion of the memorial from top to bottom include: Ager GERHARD; Buisman RICHARD; Chmel MARKUS; Hammerle HELMUT; Hitsch GUNTER; Kogler EDUARD; Kuneio DIETER; Malina WOLFGANG; Schmidinger SUREN; Sichart

in the descent toward Durak, with a scenic view of the plunging landscape amidst a thick pine forest. Although the monument does not bear a date, the typography and iron cross (a military symbol) indicate its status as a World War I-era monument, probably erected after the war.²⁹¹ While the memorial's humble tone suggests a quiet respect for the lower-ranking German workers, it also indicates a patently nationalist character in light of the multinational labor force.

The monument appears to be connected to three other memorials in the area. Çamalan had been an important center for truck transportation, as it stood at the center of the unfinished rail route.²⁹² A photograph from c. 1916 [Fig. 5.227] depicts an improvisational memorial to fallen German truck drivers.²⁹³ Three cannons surround an outcropping of rock that has the names of those lost inscribed on a tablet set within it.

MICHAEL; Steinberger MARIUS; Weber JOHANN; Fröwis NORBERT; Gruber ALEXANDER; Hartmann HARALD; Kasper HANNES; Liender WERNER; Nendorfer OSKAR; Pichler BURKHARD; Rainer KONRAD; Sacher ALFRED; Schandi ROLAND; Schmid MARKUS; Valent SINGER; Walt HANS-JORG. On the lower portion there are two columns. The left column contains the following names from top to bottom: Beer FRITZ; Dull PETER; Meras BERND; Siegel HANS; Essl GERD; Horvath KARL; Kaser ANTON; Stoller BERNT. The right column contains the following names from top to bottom: Denak THOMAS; Kuess ARMIN; Sekyra FRANZ; Bayer WALTER; Binder MARCO; Höfler ERNST; Kneisl FRANZ; Suitner HORST.

²⁹¹ The use of modern Turkish in a tablet at the foot of the monument indicates that it was likely erected sometime in the 1920s after the language reforms, possibly even later. The tablet reads: “HIER RUHEN DEUTSCHE BÜRGER, DIE BEIM BAU DER BAGDAD-BAHN IHR LEBEN LIESSEN” / “BURADA BAĞDAT DEMIRYOLUNUN YAPIMINDA YAŞAMLARINI YİTİREN ALMAN VATANDASLARI [YATİYOR]” (Here rest German citizens who through the construction of the Baghdad Railway gave their lives).

²⁹² According to Hartnagel, Çamalan was the headquarters of the German truck units KK 500–508 serving Pozantı to Tarsus/Adana. E-mail message to author, September 22, 2013, 3:21 PM Central European Time. Fig. 5.169 dates back to the early beginnings of the cemetery. Although it is not certain that all Germans buried here were truck drivers, it is highly likely. The human remains were brought to Tarabya in the 1980s. Çamalan also had a small Turkish field hospital for sick and seriously wounded Turks being transported on the trucks between Mesopotamia or Palestine and İstanbul.

²⁹³ This monument no longer exists.

Atop the tablet is a winged wheel, similar to the one found in the Haifa monument. Çamalan was also home to a German cemetery, this one for Germans engaged in military service [Fig. 5.228]. The cemetery is surrounded by a low stone wall that appears to be of the same quality and size as the stone produced for the railway's tunnels, bridges, and culverts. At the far end from the gated entrance stands a stone similar in formation to the memorial to the forty-one railway workers. In Belededik itself, there was also a German cemetery that comprised a low rounded wall, also with a gate, surrounding a central stone that commemorated three ranking military officers²⁹⁴ [Fig. 5.229]. Rectangular stones are also set into the earth, possibly marking the burial places of lower-ranking soldiers.

Cemeteries for the prisoners of war on the Taurus stretch are even less elaborate. The so-called Christian cemetery at Belededik actually functioned as a cemetery for British, French, Australian, New Zealander, and possibly Russian soldiers who perished while laboring in captivity [Fig. 5.230]. The cemetery is surrounded by a wooden fence similar to those delimiting the premises of railway property. The actual graves are circumscribed by another smaller fence, and the crosses marking the graves are reconfigured elements of the same pickets.²⁹⁵ There are no cemeteries designated for

²⁹⁴ According to Hartnagel (e-mail message to author, September 22, 2013, 3:21 PM Central European Time), the remains of the Germans from the cemetery at Kıralan (Grosse, Nahler, and Maier, among others) were brought to the Tarabya German central cemetery. The Kıralan cemetery was not cared for since then. The German Honorary Consul wanted to bring tourism to Belededik, and pieces broken off the monument at Kıralan were re-erected there, leaving the Kıralan cemetery in very bad condition. It is most likely that no one is still buried there.

²⁹⁵ Information on the graves from AWM is as follows: "Graves in the Christian cemetery at Belededik [sic], Turkey. The cross in the foreground reads 'Pte H Bradley' and is probably 10337 Private (Pte) H Bradley, Worcestershire Regiment who died on 31 October 1916. The next cross (in the centre of the image) reads 'RIP E. S. Taylor C.P.O. British Royal Navy Died 16 October 1916 Age 38.' The cross to the left of Chief Taylor's reads 'RIP Pte W. Allen Age 33.' This is 552 Pte William Allen, 9th Battalion from Maryborough, Queensland. A 30 year old painter prior to enlisting on 26 August 1914, he embarked for overseas with E Company from Brisbane on 24 September 1914 aboard HMAT Omrah. While serving at Gallipoli, he was

perished workers who were Ottoman, which indicates that their bodies were likely delivered to their families and away from the railway environs.

5.10.5 Imperial Symbols: Yıldız and Hereke

The construction of the Ottoman rail network also prompted architectural projects that served the veritable constellation of economic, political, philanthropic, and semicolonial activities affiliated with it. It is not possible to account for all of these projects here, nor is it easy to determine where the railway's impact begins and where it ends. Regardless, important examples demonstrate that architectural projects auxiliary to the railway network's construction articulated a maturation of German self-confidence abroad and a deepening investment in the Ottoman partnership. This maturation is traceable through both axiomatic and dialogic approaches to architectural design that provide a strong visual record extending the German-Ottoman agenda well beyond the railbed.

While the vast majority of the auxiliary building program associated with the Ottoman rail network served predominantly German interests, there are notable exceptions that originated entirely from Ottoman volition through Ottoman designers and laborers. The earliest and most significant examples—the Yıldız Şale and the pavilion at Hereke—are directly related to Wilhelm's visits to İstanbul in 1889 and 1898 and clearly

reported missing in action on 28 June 1915 at Gaba Tepe and later confirmed to be a prisoner of the Turkish army. He died on 20 December 1916 while working on the Baghdad to Berlin Railway. These three bodies were later reinterred in the Baghdad (North Gate) War Cemetery, Iraq." AWM P01645.002.

demonstrate Abdülhamid's desire to impress Wilhelm and engender his affection through architecture.

The Yıldız grounds had developed originally as private imperial hunting grounds until 1880, when Abdülhamid II, famously fearful of attack by an enemy, opted to move the imperial seat to the higher Yıldız grounds where he would greatly expand the campus, employing the esteemed Balyan family of architects and later D'Aronco, until his deposition in 1909.²⁹⁶ The architectural centerpiece of the campus was the sultan's residence, known as the Şale Köşk. The word "Şale" was derived from the Turkish transliteration of the German word "Chalet," which is reflected in the pavilion's extensive use of wood and bargeboard and its steeply pitched roof. The directive to build in this style seems to have been independent of the Sultan's desire to appeal to anyone in particular and simply a matter of personal taste. However, the choice became a *propos* when the residence was used to host Wilhelm II on his visits. For both occasions, Abdülhamid II commissioned expansions and modernizations to the preexisting structures, encompassing everything from a grand parlor almost completely lined with mother of pearl (the Sedefli Salon) [Fig. 5.231] to European-style toilets and sinks in the first expansion and a grand reception chamber in the second expansion, carefully choreographed and staged for Wilhelm and Empress Auguste Viktoria's visit of only

²⁹⁶ There is not much literature on Yıldız Palace. The best place to begin is Bulent Bilgin, *Geçmişte Yıldız Sarayı / Only Yesterday at Yıldız Sarayı* (İstanbul: Yıldız Sarayı Vakfı, 1988). I also eagerly await the forthcoming PhD dissertation on the palace by my colleague Deniz Türker of Harvard University.

three days and executed by D'Aronco.²⁹⁷ Abdülhamid II, who was proud of his own carpentry skills, even made some of the pieces himself.²⁹⁸

The Hereke pavilion, built in the Kaiser's honor for his visit in 1898, postdates D'Aronco's arrival in the empire and implicates him as its designer—which, despite its absence from accounts of his collected work, seems likely from its lightness, its use of wood, and its symbolic connection to Yıldız [Fig. 5.232]. The existing literature is probably correct in its assessment that the pavilion was made of prefabricated units over the course of approximately three weeks, probably at the imperial factory, and transported to its site adjacent to the Hereke textile factory on the Gulf of İzmit.²⁹⁹ The prefabrication is verified by the grooved joinery evident on-site. The pavilion comprises a main central unit housing a greeting area with doors leading axially from the small dock to the factory, flanked by two units topped with parabolic metal sheaths for a recognizable “oriental” effect. The interior is decorated lavishly. [Fig. 5.233] Both the pavilion [Fig. 5.234] and the factory itself [Figs. 5.235-5.236] became popular as both an artistic and photographic subject, celebrating the concomitance of crafts and industry with geopolitical symbolism.

²⁹⁷ Concerning D'Aronco, see Afife Batur, “Raimondo d'Aronco et ses Travaux Éffectués à Istanbul,” *Architettura e Architetti Italiani ad Istanbul tra il XIX e il XX secolo* (İstanbul: Istituto Italiano di Cultura, 1995), 33–38. Lovingly reproduced drawings from D'Aronco's oeuvre may be found in Istituto Italiano di Cultura di Istanbul, *Osmanlı Mimarı D'Aronco: İstanbul Projeleri 1893–1909, Restorasyonlar, Projeler, Kitaplar* (İstanbul: İstanbul Araştırmaları Enstitüsü: İtalyan Kültür Merkezi, 2006).

²⁹⁸ Bilgin, *Geçmişte Yıldız Sarayı*, 13.

²⁹⁹ Andrew Finkel, “Wood Culture and Timber Houses,” Turkish Cultural Foundation, accessed September 24, 2013, <http://www.turkishculture.org/architecture/houses/wood-timber-houses-278.htm>. Finkel repeats the error of placing the Kaiser's visit in 1894 instead of 1898.

5.10.6 The Auguste-Viktoria-Stiftung in Jerusalem

The single most monumental building erected in the Ottoman empire as a result of the German-Ottoman relationship was the Auguste-Viktoria-Stiftung, a church and pilgrim hospice campus located prominently on the Mount of Olives in Jerusalem, designed by the Berlin architect Robert Leibnitz (1863–1921) and completed in 1910³⁰⁰ [Fig. 5.237]. The complex, conceived by the Kaiser and his wife while visiting Jerusalem in 1898, was to be the center of the German Protestant community in Palestine and would signify its philanthropic mission with a public hospice and a large church, the Lutheran Church of the Ascension [Fig. 5.238].

Until his commission in Jerusalem, Leibnitz had worked exclusively in the field of church design in and around Berlin, primarily Evangelical churches.³⁰¹ Nonetheless, his church designs retain a certain amount of historopolitical charge through their clear referencing of Hohenzollern imagery and castle architecture, not only to the delight of the Kaiser, but also somewhat in tune with the heavy stone of the traditional architecture of Jerusalem.³⁰² Not unlike the Hejaz Railway, funding for the project was collected as

³⁰⁰ The Auguste-Viktoria-Stiftung broke ground in 1907. Edina Meyer-Maril, “Der ‘friedliche Kreuzritter’ Kaiser Wilhelm II.—Die Kreuzfahrrezeption in der deutschen Kunst des 19. Jahrhunderts,” in *Tel Aviver Jahrbuch für deutsche Geschichte*, 2006, ed. Moshe Zuckermann (Tel Aviv and Göttingen: Minerva Institut für deutsche Geschichte, Universität Tel Aviv, Ramat Aviv and Wallstein Verlag, 2006), 82–85. Concerning Leibnitz, see Carl Weigandt, *Geschichte des Corps Saxonia-Berlin zu Aachen 1867–1967* (Aachen: Alte-Herren-Vereinigung des Corps Saxonia-Berlin 1968), 143.

³⁰¹ Leibnitz is most well-known as the architect, along with Carl Gause, of the storied Adlon Hotel in Berlin.

³⁰² This characterization comes from David Kroyanker and Dror Wahrman, *Jerusalem Architecture, Periods and Styles: The Jewish Quarters and Public Buildings Outside the Old City Walls, 1860–1914* (Jerusalem: Jerusalem Institute for Israel Studies, 1987), 42.

donations through a widespread campaign targeting Lutherans across Germany and, as in the Hejaz campaigns, donors were rewarded with a medal symbolizing the empire's gratitude, known as the Cross of the Mount of Olives [Fig. 5.239]. The site's 4.5 acres cost 142,580 German marks and were, negotiated through the dragoman known as Maroum.³⁰³

The complex is organized around a central courtyard flanked by two- and three-story cloister-like wings that connect directly to the Church of the Ascension. The two main floors house dormitories for the pilgrims as well as facilities for staff, who lived on premises. The decorative program is one common to German Neo-Romanesque architecture, including an elaborate mosaic over the entry to the pilgrims' dormitories [Fig. 5.240] and an impressive pair of winged figures at the main entrance representing Saint Michael, the patron saint of the Holy Roman empire, and Saint George, the Christian martyr of Palestine—motifs found also in Friedrich Adler's (1827–1908) Church of the Redeemer, built within the old city walls between 1893 and 1898³⁰⁴ [Fig. 5.241]. Stone reliefs depicting crusaders adorn the balustrades of the main staircase leading to the church. The imperial aspects of the building's program are memorialized in the keystone above the church's entry, which pairs the initials of the Empress with the

³⁰³ “Verzeichnis des Grundbesitzes der Kaiserin Auguste-Viktoria-Stiftung auf dem Oelberg,” Ba R901/31742.

³⁰⁴ The Lutheran Church of the Redeemer (Erlöserkirche) has a fascinating history that I do not detail in the text because it began with no specific relationship to the development of the Ottoman rail network. The best studies of the church and its architecture include Annah Krieg, “The Walls of Confessions: Romanesque Architecture, Nationalism, and Religious Identity in the Kaiserreich” (PhD diss., University of Pittsburgh, 2010), 134–80; Jürgen Krüger, *Rom und Jerusalem: Kirchenbauvorstellungen der Hohenzollern im 19. Jahrhundert* (Munich: Oldenbourg Akademieverlag, 1995), 56–107; and Peter Lemburg, “Leben und Werk des gelehrten Berliner Architekten Friedrich Adler (1827-1908)” (PhD diss., Freie Universität Berlin, 1989).

cross of Saint John.³⁰⁵ Within the courtyard, two massive bronze statues designed by the Berlin sculptor Gotthold Riegelmann (1864–1935) are set on pedestals jutting off the side of the building.³⁰⁶ The figures allegorize the Emperor and the Empress, him as a crusader [Fig. 5.242] and her as a reincarnation of Saint Elizabeth [Fig. 5.243], mother of John the Baptist.³⁰⁷ As Adina Meyer-Maril has pointed out, their images are nearly identical to the depiction of Ekkehard and Uta at Naumburg Cathedral (11th century)³⁰⁸ [Fig. 5.244]. She has also noted similarities of the figure representing the Empress to the depiction of St. Elizabeth in Marburg Cathedral³⁰⁹ [Fig. 5.245].

The crusader iconography is represented only tacitly in the Church of the Ascension, the design of which involved the Kaiser directly. He commented specifically on color, noting that the building should be built “in the Roman style of the best periods of the crusaders and the Hohenstaufers [a medieval dynasty of German monarchs].”³¹⁰ Much of the architecture and commissioned art of the German community in Palestine

³⁰⁵ Klaus Hansel, “Ehrungen in der evangelischen Kirche Preußens: Unter dem Kreuz von Jerusalem,” *Jahrbuch für Berlin-Brandenburgische Kirchengeschichte* 56 (1987): 272.

³⁰⁶ Meyer-Maril misidentifies the sculptor as Berl Hildhauer Gotthold. Gotthold Riegelmann worked on other important projects in Germany, including the Posener Schloß, the Kölner Hohenzollernbrücke, the Borsig Haus in Berlin, and the Romanischen Haus at Auguste-Victoria-Platz in Berlin. See Vera Frowein-Ziroff, *Die Kaiser-Wilhelm-Gedächtniskirche: Entstehung und Bedeutung* (Berlin: Mann, 1982), 182, 317, 321.

³⁰⁷ See Meyer-Maril, “Der ‘friedliche Kreuzritter,’” 83. St. Elizabeth also held importance for Islam, cited not by name, but nevertheless as the wife of Zachariah.

³⁰⁸ Ibid.

³⁰⁹ Ibid.

³¹⁰ Peter van Treek and Elgin Vaasen, “Die Mosaiken und Malereien der Himmelfahrtskirche,” in *Evangelische Himmelfahrtskirche und Hospiz der Kaiserin Victoria-Stiftung auf dem Ölberg in Jerusalem*, ed. Michael Trensky, Bernd Frese, and Auguste-Viktoria-Stiftung (Hannover: Die Stiftung, 1990), 67. “Im Stile der besten romanische Kunstperiode aus der Zeit der Kreuzzüge und Hohenstaufen zu schaffen.”

was designed in Germany, sent to the Holy Land, and recreated by a local German artist or builder, and such was the case with the ceiling murals of the Church of the Ascension. They were provisionally designed by the Berlin-based painter Otto Vittali the younger (1872–1959), who led a successful glass and painting workshop and who occasionally dabbled in Orientalist themes.³¹¹ Vittali's designs were executed by a certain Jerusalem-based Schmidt whose handiwork is most prominent in the impressive ceiling murals, depicting religious scenes relating to the ascension of Christ, which was said to have occurred not far from the site.³¹² Intermixed in the imagery is a representation of Wilhelm and Auguste Viktoria, personified by the Sapientia and Misericordia, respectively, with a model of the Church of the Sepulchre of Saint Mary above the nave.³¹³ Representations of a coterie of crusaders who had successfully or unsuccessfully attempted to reach Jerusalem flank the Emperor: Peter of Amiens, Tancred, Conrad III, Louis VII, Philipp II, Augustus of the Franks, Richard the Lionhearted, Frederick I Barbarossa, and Frederick II.³¹⁴ Seeing himself as the inheritor of the Christianizing mission of the House of Hohenstaufen, Kaiser Wilhelm II autohistoricizes himself as a modern-day crusader, revealed not only through the iconography of Leibnitz's church but also through the entire project of historicism, which by the time of the building's opening in 1910

³¹¹ On Vittali, see Erwin Schneider, "Pforzheim," in *Ekkhart Jahrbuch für das Badner Land* (Freiburg im Breisgau: Landesverein Badische Heimat, 1961), 101–5.

³¹² Edina Meyer-Maril, "Jerusalem in Großformat: Die 'Heilige Stadt' in der deutschen Monumentalmalerei des 19. Jahrhunderts," *Assaph: Studies in Art History* 2 (1996), 205–32. See also van Treek, "Die Mosaiken," 61; Karl Heinz Ronecker, Jens Nieper, and Thorsten Neubert-Preine, eds., *Dem Erlöser der Welt zur Ehre: Festschrift zum hundertjährigen Jubiläum der evangelischen Erlöserkirche in Jerusalem* (Leipzig: Evangelische Verlagsanstalt, 1998), 148.

³¹³ Meyer-Maril, "Der 'friedlichen Kreuzritter'," 84.

³¹⁴ Krüger, *Rom und Jerusalem*, 108.

represented a relatively conservative notion of the plastic arts. As Jürgen Krüger has noted,

Wilhelm II saw himself as a pilgrim and a crusader in the Holy Land... and there started in the autumn of 1898 a new wondrous, unique crusade under the tutelage of peace and reconciliatory love. The imperial couple had regained a peaceful relationship with Holy Places and had recovered worthy places for evangelical Christianity and built decent places for practicing evangelical Christianity. As a living sign of this peaceful conquest, so too can [Auguste-Viktoria-Stiftung] be understood as part of the revival for Christians.³¹⁵

Such a “revival” was also the exclamation of a colonial triumph, which had humbler architectural origins several centuries prior and can be seen as the product of a four-and-one-half-decade building program that began in Haifa and had always been inextricably linked to railway construction.

5.10.7 The German Colony at Haifa

The German Colony at Haifa, established in 1868 and the first Templer colony in Palestine, served as a paradigmatic model for future settlements in the Holy Land in both its architectural and urban planning principles. Schumacher, the prospective engineer of the Haifa-Damascus railway, was also the colony’s leader and planner.³¹⁶ Schumacher’s main organizational move was a wide boulevard (known today as Ben Gurion Avenue)

³¹⁵ Ibid.: “Wilhelm II sah sich als Wallfahrer und Kreuzfahrer im Heiligen Land... und es begann im Herbst 1898 ein neuer wundersamer, einzigartiger Kreuzzug unter dem Zeichen des Friedens und der versöhnenden Liebe. Das Kaiserpaar hatte auf friedlichem Wege die Heiligen Stätten wiedergewonnen und für das evangelische Christentum würdige Stätten wiedergewonnen und für das evangelische Christentum würdige Stätten errichtet. Als lebendiges Zeichen dieser friedlichen Eroberung mußte aber gerade die Wiederbelebung des Pilger- und Hospizgedankens gelten, der sich in dem Komplex der Ölbergstiftung nun endlich realisierte.”

³¹⁶ Information on Schumacher’s first scheme for the colony can be found at GSI. See GSI “Deutsche Bauten in Palästina” [loose report].

that led from the base of Mount Carmel (also the foot of the Bahá'í Gardens) to the shore and intersected perpendicularly with smaller side streets [Fig. 5.246]. Each colonist had a similar freestanding home, and it is suspected that these were also of Schumacher's design.³¹⁷ The houses are sturdy two-story abodes with pitched roofs and generous lawns. Each house comprises three to four bedrooms and, despite some variation, they present a remarkably unified aesthetic program.

Most notable are the biblical passages inscribed above each doorway that suggest Schumacher believed that architecture had not only the ability but also the obligation to proselytize [Fig. 5.247]. The passages are laden with meaning. The one above the entrance to Schumacher's own house reads: "Bis hierher [sic] hat der Herr geholfen" ("Thus far the Lord had helped us"), inscribed at the house's time of construction in 1890³¹⁸ [Figs. 5.248]. The verse refers to the story of the Prophet Samuel who took a stone and placed it between the modern cities of Tell en-Nasbehm (then Mizpah, a city of Benjamin³¹⁹) eight miles north of Jerusalem and Ramses (then in the ancient land of Goshen, and referred to as Shen) in Egypt. Samuel called the stone "Ebenezer," which translates from Hebrew as "Look what God has done for us up to this point." Schumacher most definitely understood the colony in Haifa as a monument, with a kinship to Samuel's biblical monument somewhere in modern-day Gaza. While the Ebenezer memorial, on its face, commemorates the glory of God, it also commemorates the hope for that glory to deliver the enlightened community through the adverse conditions of its

³¹⁷ This is supported by the fact that the plans for the colony contain the dimensions of the house in Schumacher's file, despite the fact that no actual architectural plans remain.

³¹⁸ This verse is from 1 Samuel 7:12.

³¹⁹ Some have argued that Mizpah is actually modern-day Neby Samwil.

surroundings—the infidel Muslims, the absence of the infrastructure and order known to Germany, etc. Samuel established the monument after having witnessed the wrath of the local Philistine armies, the single greatest threat to the Kingdom of Israel.

As if the contrast between the sturdy modern houses of the German settlers and the ramshackle communities of Ottoman Palestine were not clear enough, the proselytizing program goes one step further in analogizing the Ottomans as Philistines, a historical and ethnic group that through the writings of Goethe had become synonymous with anti-intellectualism and hollowness.³²⁰ In his poem “Zahme Xenien” (Gentle Reminders), Goethe declares:

Was ist ein Philister? / What is a Philistine?
Ein hohler Darm / A hollow gut
mit Furcht und Hoffnung ausgefüllt / Full of fear and hope
Daß Gott erbarm!³²¹ / That God will have mercy!

Samuel, who thanks God for his grace in the past, stands in noble contradistinction to the threatening Philistines who passively hope for God’s grace in the future. The significance of Schumacher’s choice of inscription cannot be exaggerated; it is a clear delineation of German values in the face of Oriental, if not Ottoman, values; a culture of building (memorials and nations) and love of the grace of God set against the backdrop of a culture of destruction and passive hope for the mercy of God.

³²⁰ See Estelle Morgan, “Goethe and the Philistine,” *The Modern Language Review* 53, no. 3 (July 1958): 374–79.

³²¹ See Johann Wolfgang von Goethe, *Goethes Sprüche in Reime, zahmen Xenien und Invektiven* (Berlin: Max F. Hecker, 1908), 111.

5.10.8 The German Embassy at Taksim and Residence at Tarabya

The most conspicuous architectural symbol of the German-Ottoman relationship was, not surprisingly, the German embassy in İstanbul, which, although designed before the unification of the German empire, was completed after it in 1877, becoming the first embassy representing the German empire to be built abroad.³²² [Figs. 5.249-5.250]

The building, situated prominently on a hill near Taksim Square, was designed by the architect Hubert Göbbels (1835–1874) in İstanbul and later executed by the architect Albert Körtum (1845–1921). It is a rectangular five-story structure with classicizing elements, including stout pediments on the windows of the piano nobile. The Classical elements of the façade are tempered by an extensive use of red brick within the façade's compositional frame of stone, lending it a Prussian air. Inside, cascading marble stairwells and an extensive fresco program import the gravitas the building seeks to communicate on the outside.

The building was derided in the German and Turkish press alike for its bombast, sheer size, and retrograde historicist appearance. The sharpest critique (uncharacteristic for the publication) came from the *Deutsche Bauzeitung*:

³²² See AA R 250602, 250798, 250799, 250813/1 Bl. 1-5 & 184R, 269765 Nr. 50602; AA Botschaft Konstantinopel 837, 843; Barbara Schwantes, *Die Kaiserlich-Deutsche Botschaft in Istanbul* (Frankfurt am Main: Peter Lang, 1997), 11. Studying even deeper German-Ottoman ties going back to the period before the railways' construction, one would also need to mention the German Hospital (*Alman Hastanesi*), located not far from the German Embassy. For the history of the hospital see Malte Fuhrmann, "Das deutsche Krankenhaus," in *Deutsche Präsenz am Bosphorus: 130 Jahre Kaiserliches Botschaftspalais—120 Jahre historische Sommerresidenz des deutschen Botschafters in Tarabya / Boğaziçi'ndeki Almanya: Malman İmparatorluğu Sefaret Köskü'nün 130 Yılı—Almanya Seferati Tarabya Yazlık Rezidansı'nın*, ed. Matthias von Kummer (İstanbul: Zero Books, 2009), 257–70. As Fuhrmann documents, the hospital has continued to play an important role for German emigrants living in the empire through the present.

With reckless cynicism it mocks all of its conditions and, as such, requires the architecture of [cynicism's] products, it sits in his fairy environment like a desolate stranger. Grumpy and withdrawn into himself, he develops nowhere an open veranda, a porch, or asks himself about the challenges of the climate and the splendor of its surroundings.³²³

The same article quotes an anonymous Turkish bureaucrat as saying:

It is precisely this [Prussian] massiveness, which has produced the biggest impression here ... so it is the folly of the builder ... helping to direct the German influence in the Orient!³²⁴

The criticism of the project can also be seen as an indirect and early criticism of the Kaiser's artistic taste at a critical moment for German architecture. Kaiser Wilhelm took a deep interest in Göbbels's design and approved it. The progressive forces in architecture knew that the new *Kaiserzeit* meant a large number of new and highly visible civic buildings, and they sought to shape the architectural image of the unified empire in a way that would embrace or at least accommodate architecture that did not slavishly adhere to historicism.³²⁵ The perceived failure of the German embassy building in İstanbul and its sharp rebuke from the press curbed the scale and bombast of the German embassies and missions built abroad for the next three decades.³²⁶ Nonetheless, the building would stand as a symbol for the strong German presence in İstanbul, which grew

³²³ *Kölnische Zeitung*, December 19, 1877: "Mit rücksichtslosem Zynismus spottet er allen Bedingungen, die die Baukunst als solche von ihren Erzeugnissen verlange, er steht in seiner feenhaften Umgebung wie ein wüster Fremdling. Mürrisch in sich zurückgezogen, entwickelt er nirgendwo eine offene Veranda, einen Säulengang, wie ihn das Klima verlange, wo ihn die Pracht der Umgebung doch gleichsam herausfordert."

³²⁴ Ibid. "...Es sei gerade diese Massigkeit, welche hier den größten Eindruck hervorgebracht habe... so trage der Unverstand des Baumeisters... dazu bei, dem deutschen Einfluß im Orient Vorschub zu leisten!"

³²⁵ For an explanation of the ideological and architectural ambitions in the *Kaiserzeit*, see Robert R. Taylor, *Hohenzollern Berlin: Construction and Reconstruction* (Port Credit, Ontario: P.D. Meany, 1985), esp. 1-12.

³²⁶ Barbara Schwantes, *Die Kaiserlich-Deutsche Botschaft in Istanbul* (Frankfurt am Main: Peter Land, 1997), 11.

in direct proportion to the relationship based on railway construction. In 1906, not long after construction of the Baghdad Railway began, Sultan Abdülhamid dedicated a fountain to the German embassy [Fig. 5.251]. The fountain contains a dedicatory inscription and mirrors the city's expansion of its waterworks.³²⁷

While the German-Ottoman business was officially conducted in Taksim, the German ambassadors took residence in Tarabya³²⁸ [Fig. 5.252]. The main residence, designed by the architect and archaeologist Wihelm Dörpfeld (1853-1940) between 1873 and 1878, is a three-story structure that curiously yet successfully melds the *yalı* wood house type with a European villa, with distinct islamicizing elements in the cusped arches adorning the windows and porch [Fig. 5.253]. The grounds also contain a number of unique architectural elements, including a small chapel reappropriated from a preexisting hamam [Fig. 5.254].

5.10.9 Germania Han

An important seven-story office building designed by Jachmund near Sirkeci on Vakıf Hanı Sokak was completed in 1890 [Fig. 5.255]. In its original form as an office building handling trade and other business spawned, in part, by the railway, the building became known as the *Germania Han* (German House), and records indicate that a

³²⁷ Barbara Schwantes, "Das Palais der Kaiserlich-Deutschen Botschaft zu seiner Entstehungszeit / Alman İmparatorluğu Sefaret Köşkü ve İnşaat Yılları," in *Deutsche Präsenz am Bosphorus*, ed. von Kummer, 88. The transcribed inscription reads: "Bu Çeşme-i Âli'yi hicrî 1324 ve miladi 1906 yılında, Osmanlı İmparatorluğu İstanbul Sefareti'ne, Kağıthane menbaından gelen su için inşa ve hediye etmiştir."

³²⁸ Orhan Türker, *Therapia'dan Tarabya'ya: Boğaz'ın Diplomatlar Köyünün Hikayesi* (İstanbul: Sel Yayıncılık, 2006).

colorful array of businesses took up residence there. Later, when the Dresdner Bank established a dedicated branch of its subsidiary, the Deutsche Orientbank, in İstanbul, the building became synonymous with the opportunities associated with German finance in the city and offered a counterpoint to the French-designed monument to debt, the Public Debt Administration Building, designed by Vallauray.³²⁹ Jachmund's design for the triangular site, a mix of Classical motifs [Fig. 5.256] with a cupola that may emulate Bramante's Tempietto [Fig. 5.257], differs vastly from his orientalist effort at Sirkeci and was nowhere as successful at melding architectural styles. The interior, with its curious and sculptural spiral staircase [Fig. 5.258] is at odds with the rigid geometric ornament of the exterior [Figs. 5.259-5.260]. And yet, despite its stylistic discord, the building remained an important landmark symbolizing the growth wrought by the railway in the historic part of the city and laid the groundwork for that part of the city's status as a center for architectural experimentation in the early twentieth century.

5.10.10 German Schools in İstanbul

The proliferation of German schools across the Ottoman empire developed in direct proportion to the expansion of the railway network. German expatriates and the consulate helped to establish schools in all of the major cities of the railway network,

³²⁹ There is surprisingly little work done on Vallauray. See Mustafa Servet Akpolat, "Levanten Kökenli Fransız Mimar Aléxandre Vallauray" (Ph.D. diss., Hacettepe Üniversitesi, 1991). The Deutsche Orientbank established its first branch in 1906 at the Agopian Han at Rue Voivode 67, sharing the space with the Compagnie du Chemin de Fer Mersine-Tarsous[sic]-Adana. They moved it to the Germania Han sometime in the following decade. Historical Association of Deutsche Bank, *A Century of Deutsche Bank in Turkey* [Limited Printing] (İstanbul, 2009), esp. 8–13; Klaus-Dietmar Henke, ed., *Die Dresdner Bank im Dritten Reich* (Munich: Oldenbourg Wissenschaftsverlag, 2006), 255–56.

including Eskişehir, Damascus, Jaffa, Aleppo, Jerusalem, and Adana.³³⁰ These schools built upon the curricular model of the original German school in İstanbul, established in 1868, which entailed the coeducation of German and Turkish children separated by gender but not by ethnicity.³³¹ Schools, unlike hospitals (some of the earliest “German” structures in the empire) [Figs. 5.261-5.262] were mostly appropriated from existing building stock and were not typically architecturally noteworthy.

However, the new German schools of İstanbul, three by 1914—Yedikule [Fig. 5.263], Taksim [Fig. 5.264], and Beyoğlu / Tünel [Fig. 5.265]—were noteworthy in both their progressive pedagogy and their architecture. The Yedikule school is a simple two-story structure with a pronounced bay forming its entry and an ornate array of accents adorning the windows and roofline. The Beyoğlu / Tünel school, which was for girls, is a unique structure, part two-story and part three-story, with a highly expressive cornice line of waves and gothic arches. Interior images reveal a great deal about the relatively radical pedagogy that debuted on the premises, one that a select few Turkish girls, in particular, would have encountered nowhere else at the time.³³² One shows girls hard at work in a chemistry lab, engaging in the hard sciences that were traditionally reserved for boys [Fig. 5.266]. Another shows girls in a physical education class performing traditional *Turnen* exercises [Fig. 5.267]. The image indicates that the proliferation of the

³³⁰ Ba R901/31747

³³¹ Records of the various schools, their curricula and key data can be found in Ba R901/31748.

³³² For an excellent study of education under the Tanzimat reforms that contextualizes the differences, see Emine Evered, *Empire and Education Under the Ottomans: Politics, Reform and Resistance From the Tanzimat to the Young Turks* (London: I.B. Tauris, 2012); esp. 264–67 for documentation on curricula and pedagogy for the *rüşdiye* (a progressive type of school for girls). See also Benjamin C. Fortna, *Imperial Classroom: Islam, the State, and Education in the Late Ottoman Empire* (Oxford: Oxford University Press, 2002).

Turnbewegung, the politicized gymnastics movement native to Germany, was not only not limited to boys, with whom it is mostly associated, but also that it was extended to girls and foreigners, who were welcomed into the greater nationalistic project well before either world war.

The lives of children, and the differences between the lives of German and Turkish children, were on full display in Konya. Unable to acquire swings and other conventional equipment common on playgrounds in Germany, railway workers improvised in the front yards of their homes, building swings from scrap pieces from the railway construction³³³ [Fig. 5.268]. Set behind the ubiquitous picket fence, the small playgrounds of Konya clearly differentiated the lives of even its youngest European inhabitants from its Ottoman ones.

5.10.11 The Vefa Kilise Mosque Minaret

Philipp Holzmann GmbH's architectural engagement with the Ottoman empire has been delimited to the railway's buildings and associated projects but a lone drawing from the Holzmann archives implicates them in a very unique project. The drawing [Fig. 5.269] is of a minaret for the "Vefa Moschee" or the Vefa Kilise Camii, a Byzantine church in Fatih converted to a mosque after the Fall of Constantinople. The minaret

³³³ The concept of the playground, by many accounts, originated in Germany as a means of learning "in the sun" (*zur Sonne*) and with the body, a concept ("*Sonnenbaulehre*") that can be traced to Bernhard Christoph Faust (1755–1842), a pedagogist and writer from Lower Saxony. His 1833 publication is particularly intriguing in its total conception of railways, cities, and outdoor leaning. See Bernhard Christoph Faust, *Über Wasser, Eisenbahnen und neue Städte zur Sonne* 2 vols. 2 (Bückeburg, 1833).

drawing was executed in 1913, shortly after Alexander van Millingen (1840-1915), the esteemed Byzantinist, documented and drew the building (without its minaret) [Fig. 5.270] in his volume the *Byzantine Churches of Constantinople: Their History and Their Architecture* in 1912.³³⁴ Van Millingen considered the building as part of the Comnenian and Palalogan architecture of the city, an argument which is far easier to visualize when the minaret is absent. The minaret, however, does appear in A.G. Paspates' 1877 publication *Vyzantinai Meletai Topographikai kai Historikai Meta Pleistōn Eikonōn* (Byzantine Topographic Studies) [Fig. 5.271], indicating that either Millingen strategically left the minaret off or that some time between 1877 and 1912 it collapsed or was dismantled.³³⁵ The disastrous of Mürefte earthquake of 1912 is a likely culprit for its collapse. The new minaret, designed of ferroconcrete (*Eisenbeton*), appears as a faithful restoration of the one in Paspates' etching and indicates no special architectural interpretation. It is nonetheless noteworthy that the authority, probably the imam, commissioning the renovated minaret trusted the sacred work to Holzmann. This demonstrates the profound sense of trust the company had garnered in İstanbul through the work of Haydarpaşa and the willingness to permit the knowledge and expertise into the realm of sacral architecture.

³³⁴ Alexander van Millingen, *Byzantine Churches of Constantinople: Their History and Their Architecture* (London: Macmillan and Co. Ltd., 1912), 246.

³³⁵ Alexandros Georgiu Paspatēs, *Vyzantinai Meletai Topographikai kai Historikai Meta Pleistōn Eikonōn* (Kōnstantinoupolei: Ek Tou Typographeiou A. Koromēla, 1877).

5.10.12 German Adaptations in the Hejaz: The Meißner Residence at Ma'an and the "Henschel" and al Anbarya Mosques

The lives of the German engineers in the Hejaz looked considerably different than those elsewhere in the empire. Meißner's house at the Ma'an station, just south of Amman, was the most spacious railway worker's house to be found in the entire network [Fig. 5.272]. While it is not clear who designed it, the house demonstrates a rather striking blend of formal template and material palette. The formal template is a standard three-story German *Wohnhaus* with a steeply pitched roof, while the material palette comprises the light rough-hewn ashlar stone common to the northern parts of the Hejaz Railway. The wooden shutters, which seem incongruent on the stone structure, are particularly striking

One of the most original elements of the railway network's architectural production was undoubtedly the creation of a moving mosque for the Hejaz railway, appropriated from a standard Henschel locomotive and outfitted with a small impromptu dome. The only known image appeared on the cover of *Servet-i Fünun* on August 23, 1907 [Fig. 5.273]. Because the car would have been moving and perpetually changing its directional orientation while in use, there is no qibla wall but rather an ersatz niche serving as a symbolic, rather than literal, directional marker towards Mecca. It is, however, possible that the niche was able to rotate in order to accommodate its changing orientation to the kabaa. A comparison with the normal third class railway cars illustrates the markedly different nature of the two spaces [Fig. 5.274].

Greeting pilgrims at their arrival in Medina is a fixed mosque, al Anbarya, built in tandem with the construction of the Medina station [Fig. 5.275]. The mosque demonstrates an adherent use of the same rough-hewn ashlar block common in the railway, only smaller and darker in this case. Five high portals demarcate the entry and the face toward the station. They lead to the interior, which is graced by an impressive dome. The dome is abutted above the portico by two medium-sized domes and three smaller ones that appear to have been painted or plastered. The stone minarets are distinctly Ottoman in style, signifying the territorial claim, and from above [Fig. 5.276] the dome's buttresses can be seen to be both square and triangular channels with beveled edges, rendering the mosque in a dynamic, geometricized surface.

5.11 Modern Scenographic: Ottoman Railway Urbanism

5.11.1 Discerning Principles of Railway Urbanism

Through its construction of buildings and monuments, the Ottoman railway network had a widespread impact on the architectural landscape of the hundreds of cities and towns where it touched down. And while neither the German builders nor the Ottoman bureaucrats responsible for its realization at various stages formally engaged the services of urban planners, there were profound urbanistic goals as well as effects that permanently shaped the urban landscape and the lives of its inhabitants.³³⁶

³³⁶ Interesting comparisons of the state of urban planning in Germany and in the Ottoman empire can be drawn through roughly contemporaneous studies: Zeynep Çelik, *The Remaking of Istanbul: Portrait of an Ottoman City in the Nineteenth Century* (Berkeley: University of

Max von Oppenheim's remarkable and eccentric exegesis on the Baghdad Railway, "Zur Entwicklung des Bagdadbahngebietes und insbesondere Syriens und Mesopotamiens unter Nutzanwendung amerikanischer Erfahrungen" (The Development of the Baghdad Railway Area and the Practical Application of the American Experience in Syria and Mesopotamia), which was issued only as a manuscript, is the most systematic outline of the Ottoman railway's urbanizing aspects.³³⁷ The study came out of a visit Oppenheim paid to the United States in 1902, where he observed with great interest the ways in which the American railways had opened up its western frontier.³³⁸ Although a large part of the railways had already been built or were still underway, it is likely that the text circulated throughout the German embassy and consulates in the empire as well as among the railway administrators and the Holzmann staff. Von Oppenheim's prescriptive thoughts emphasize a number of lessons for the new urbanism of the Mesopotamian railway cities, based on the touted American model.³³⁹ These include the wisdom of strategically placing stations at important geographic thresholds such as river crossings and the feet of mountains. As there are fewer such natural occurrences in Mesopotamia than in the American west, von Oppenheim suggests an additional emphasis on cities and villages, which he describes as being substitute features of geography in the

California Press, 1993) and Brian Ladd, *Urban Planning and Civic Order in Germany, 1860–1914* (Cambridge, MA: Harvard University Press, 1990).

³³⁷ Max von Oppenheim, "Zur Entwicklung des Bagdadbahngebietes."

³³⁸ Apparently, Oppenheim had an interest in staying in the United States and obtaining a diplomatic position at the German Embassy in Washington, D.C., for which he was rebuffed on grounds of his personality and perhaps because of anti-Semitism. See Martin Kröger, "Mit Eifer ein Fremder: Im Auswärtigen Dienst," in *Faszination der Orient: Max von Oppenheim—Forscher, Sammler, Diplomat*, eds. Gabriele Teichmann and Gisela Völger (Cologne: DuMont, 2008), 119.

³³⁹ Von Oppenheim, "Zur Entwicklung des Bagdadbahngebietes," 290–93.

absence of topography. However, these cities would be difficult to alter with the railway, as their traditional structures included fortifications and/or agricultural rings (“gardens”). To penetrate these, von Oppenheim suggested the American convention of building absolutely “straight and wide” roads meeting at right angles to penetrate the gardens connecting the station to the old city. He saw advantages in placing the stations slightly outside of the city (which was, in actuality, already the standard practice), as this would promote new growth in the Bedouin and rural Arab communities that were inherently disinclined toward it. Von Oppenheim suggested that the construction of railway workshops and, most importantly, stores with goods, would assist in this process. Finally, he had the foresight (or audacity) to suggest that some of the locations could later develop into railheads for branch lines to further extend the network into the desert, particularly if the long-debated plans to irrigate Mesopotamia were to eventually be realized.

Ultimately, von Oppenheim’s prescription was not as specific to Arabs and Mesopotamia as it might at first suggest. But it is nevertheless indicative of two important things. One is that the American landscape, a culture that had not, until quite recently, stood to offer erudite Europeans any form of architectonic or urbanistic inspiration, now served as a new model. Second, the prescription offered what is perhaps the first tacit explication of the railway’s colonial approach to planning and development. Whether the ultimate colonizing apparatus was the Ministry of the Interior or the Railway Company remains the open question.

As these urban changes had been and would be authored through otherwise unsystematic and contingent processes driven by an ever-changing admixture of parties

with vested economic, political, and religious interests, it is not possible to describe very many overarching characteristics of the railway's urbanistic transformation as it went from city to city. What follows is a reflection on what appear to be two such characteristics: the deliberate siting of the railway a significant distance from the old city core and the resulting grand boulevard, commonly known in Turkish as the *İstasyon Caddesi*, that connected the station to the old city.³⁴⁰ This reflection is followed by case studies that examine some of the unique urbanistic alterations to a selection of small, middle-sized and large urban centers, from which instructive manifestations of a German-inflected Ottoman railway urbanism can be coalesced.

The siting of the railway bed and its station in a given urban center typically followed one of two general models. In landlocked population centers, which were the great majority, the railway bed was typically laid on a relatively even topographic contour that stood anywhere between one eighth of a mile and two full miles from what were at the time the limits of the city's human settlement. Barring any problems encountered in acquiring the necessary land, the railway bed typically converged parallel to a significant intercity thoroughfare as it approached the urban center, almost always on the side opposite the human settlement.

At marine termini—Thessaloniki, Haydarpaşa, Sirkeci [**Fig. 5.277**], İskenderun, Haifa, and İzmit—the railway came in much closer contact with the existing urban fabric, primarily because it needed to connect with the preexisting port operations, which inevitably meant that it needed to penetrate, and often to replace, existing settlements. In

³⁴⁰ Most of these boulevards were relatively straight, but they do not represent the rational directness of von Oppenheim's American model, as they very often contained flourishes—such as street furniture and landscaping—and took bends that gave them a slightly picturesque and “organic” touch.

general, the railway penetrated the city and eventually veered to one extreme side of it before folding and hugging the littoral and approaching the port, either existing or newly constructed. İzmit [Fig. 5.278] was an exception, as the railway did not connect directly to the port but rather terminated very near to it, thus requiring the intermediate use of vehicles for transporting materials from sea to rail.

Meanwhile, the idiosyncrasies in the myriad urban transformations on all four of the main constituent lines of the Ottoman rail network demonstrate the extemporaneous and highly contingent relationship between railway planning and the sites it transformed. The following selection of snapshots offers a fuller picture of the nature of these transformations and establishes a panorama of the types of strategies and transformations made. First, however, these snapshots will be contextualized comparatively with German urban planning in its colonial contexts which will make both differences and similarities clearer, and address the “colonial” nature of the urban plans the railways configured and reconfigured.

5.11.2 Adventures in Urban Planning: The German Empire in Africa and China and the Colonial Paradigm of the Railway

As Ithohan Osayimwese has demonstrated, German colonial urban planning followed suit with the distinctly German emphasis on segregation³⁴¹, which can be seen as a design mechanism to stymie cultural diffusionism as it was explicated by Ratzel. The planning of Dar es Salaam is most instructive to this end. Upon arrival in Dar es Salaam

³⁴¹ Osayimwese, “Colonialism at the Center,” especially 75-114.

in 1887, the German Captain August Leue (b. 1854) decried the city's ruined state and marvelled at its bewildering and cosmopolitan mix of Africans, wealthy Arab tradesmen and Indians.³⁴² Leue's notion that Dar es Salaam was in a state of ruination bears the familiar hallmark of colonial judgment as the city was, in fact, one of the most flourishing centers of both the Indian Ocean littoral and Sub-Saharan Africa. By "ruins," Leue is likely referring to the city's unique mix of stone, coral and straw architecture, a mix that Weule documented in the same location.³⁴³ What *was* lacking was purity and clarity, the city's eclectic architecture echoing its multiethnic composition. Just as segregation was a eugenic concept in German colonies, so too did it need to be in the development of the urban plan.

For Leue and his colleagues in German East Africa, surgical incisions into existing urban fabric would not suffice to this end. Rather, plans were conceived as a complete tabula rasa necessitating orthogonality, clear hierarchies of civic and residential structures solidly built in a "European style"³⁴⁴ and, before all else, the expulsion of the natives from the city center. In addition to ridding the city of its "Negerpfaden" (Negro paths), the meandering and social alleyways of the natives with their dangerous infestation of insects and trash, Leue went one step further, instituting "dead zones" between new ethnic settlements that not only literally separated German colonists from

³⁴² August Leue, *Dar-Es-Salaam: Bilder aus dem Kolonialleben* (Berlin: W. Süsserott, 1903). See also Osayimwese, "Colonialism at the Center," 75.

³⁴³ As noted in Chapter 3.

³⁴⁴ "Bauordnung für Dar-es-Salaam" quoted in Rolf Hasse, Jörg Gabriel, *Tansania: das koloniale Erbe* (Augsburg: Selbst-Verlag, 2005), 92. See also Osayimwese, "Colonialism at the Center," 75.

the natives but also the Arab, African and Indian subgroups from one another.³⁴⁵ This segregation was obviously predicated on the wider eugenic notions of the German colonial program but it was also very often explained through “scientific” findings of German *Tropenmedizin* (tropical medicine) which, not unlike similar reform movements back home, stressed that excessive proximities, lack of urban infrastructure and (in some cases) miasma ultimately promised to infect urban dwellers with disease, which in German East Africa meant diseases like malaria, with which it had both little familiarity as well as medicinal recourse.³⁴⁶

The superimposition of railway planning on this model provided some practical planning utilities as well as some contradictions. German engineers and colonial planners, Leue included, were not unaware of the pollutive effects of the railways and their tendency to degrade the environmental quality of their immediate vicinity. But the positive benefits they wrought in terms of modernization far outweighed these concerns, which were often ultimately rationalized as merely aesthetic. A compromise of sorts was the capacity for the railway to, in and of itself, define the “dead zones” between ethnic enclaves, as it did in Windhoek [Fig. 2.79] and with even greater success in Tsingtao (Qingdao) [Fig. 2.80]. A map from the archives of the Colonial Office demonstrates how the “dead zone” created on either side of the railway in Dar es Salaam was apportioned in a sawtooth pattern of patches of land, alternately, to the colonial administration and private leasing, anticipating as it does the land rights not only of the settlements on either side of the dead zone but also the dead zone itself. [Fig. 5.281]

³⁴⁵ Osayimwese, “Colonialism at the Center,” 76.

³⁴⁶ Ibid., 75-80.

The *process* of building the railways, however, necessitated interaction and the Holzmann archives on the German colonial railways (just a matter of feet away from the Ottoman files), reveal how the engineers perceived these separations as they were made. An unidentified engineer known only through his initial, “P”, sketched a handful of scenes of the railway landscape and construction process which, on the one hand, reveal a picturesque appreciation for the “Negro hut” as it was situated in the rural landscape (not the city) [Fig. 5.282] on the one hand and the dramatic penetration of the railbed in the same landscape [Fig. 5.283] on the other. In both images a sole colonial administrator, distinct by way of his safari cap, maintains a presence of authority. Administrative headquarters and railway stations made good on Leue’s desire for solid “European style” buildings, although not without their adaptations. As is evinced by images of the administrative headquarters in Lomé (Togo) [Fig. 5.284] and the railway station at Dar es Salaam [Fig. 5.285], the key civic structures also had, to a greater or lesser degree, their own miniature “dead zones,” in this case buffering high civic life from the everyday activities of the colonial population.

5.11.3 Banja Luka, Thessaloniki, Sirkeci

To return to the Ottoman railways, one may begin with the developments in Ottoman Europe, which were the only urban plans to develop before the contemporaneous models in the German colonies of Africa and the Pacific. The so-called *Sandschakbahn*, under the leadership of Hirsch and Von Pressel, did not fulfill its original aim of connecting the Mediterranean shores of the Ottoman empire with Austria-

Hungary when it was only partially constructed from the border town of Dobrljin to Banja Luka, but it succeeded in creating an early template as an urban catalyst in a significant population center—Banja Luka—when that station opened to traffic in 1874, just four years before Bosnia would be occupied by Austria-Hungary.³⁴⁷ Banja Luka was an important *pashaluk* and regional center for the production of bricks and textiles as well as for brewing. Pressel’s schematic studies of the region trace the proposed railway on the western bank of the Vrbas River, where it would more or less be laid. Because it was hoped that the railway would ultimately continue southward to Sarajevo, Monastir, and Thessaloniki, it penetrated the city fairly deeply [**Fig. 5.286**], running roughly parallel to the main commercial thoroughfare built under the governance of Ferhat Pasha Sokolović in the sixteenth century and known today as Gospodska Ulica (Turkish: Konak Sokak). Sometime during the construction of the railway, Gospodska Ulica was widened, straightened, and rerouted at the point where it ran parallel to the railway station in order to remain a straight and broad thoroughfare.³⁴⁸ The old Gospodska Ulica and the new wider street, which came to be known as Carski Drum, are a study in contrasts. The Carski Drum [**Fig. 5.287**] is a wide tree-lined boulevard. The station is sited perpendicular to it, tucked away behind a deep driveway that masks its industrial and commercial functions. Gospodska Ulica, on the other hand, retains its meandering quality

³⁴⁷ Elmar Oberegger, *Der “Große Aufbruch” in Das gescheiterte Eisenbahnprojekt Wien-Sarajevo-Saloniki (1874–1914)* (Sattledt, Austria: Info-Büro für Österreichische Eisenbahngeschichte, 2009); Heinrich Wittek, “Sandschakbahn,” in *Enzyklopädie des Eisenbahnwesens*, ed. Freiherr von Röhl, vol. 8, *Personentunnel—Schynige Platte-Bahn* (Berlin: Urban & Schwarzenberg, 1917), 299–300.

³⁴⁸ Urban and architectural histories of Banja Luka include Ekrem Hakkı Ayverdi, *Avrupa’da Osmanlı Mimari Eserleri* (İstanbul: İstanbul Fetih Cemiyeti, II, 1981), 496, and Adem Handzic, *A Survey of Islamic Cultural Monuments Until the End of the Nineteenth Century in Bosnia* (İstanbul: IRCICA, 1996), 66–67.

and densely packed shops [Fig. 5.288]. After being occupied by Austria-Hungary, the economic livelihood of the Carski Drum and the new, orderly neighborhoods established to the north and the west of the station replaced the older Ottoman fabric as the economic heart of the city, clearly delineating the “modern” city from the “historic” city. The station and the railbed functioned as a fulcrum between the two.

The construction of the Salonica railway station, connecting that city with Skopje and Monastir, marked the first major German-led rail-to-port connection within the Ottoman empire and transformed the city’s western waterfront edge upon its completion in 1873.³⁴⁹ This is intimated in an initial sketch held by the Bundesarchiv. [Fig. 5.289] The construction of the quay adjacent to the railway terminus, located at the edge of the city’s Jewish quarter (where Hirsch had a number of friends and vested economic interests), necessitated a staggered removal of the sea wall, which began yet earlier in 1869.³⁵⁰ The land around the new quay, which connected directly to the terminal passenger station a bit to the northwest, developed rapidly into a thriving industrial sector that centered largely on the production and trade of cloth goods, including a cotton factory established by the local and prominent Jewish family Sayas (who also worked,

³⁴⁹ As has been noted, the British connection at İzmir preceded that at Salonica. See Sibel Zandi-Sayek, *Ottoman İzmir: The Rise of a Cosmopolitan Port, 1840–1880* (Minneapolis: University of Minnesota Press, 2012), 26–27.

³⁵⁰ Vilma Hastaoglou-Martinidis, “The Advent of Transport and Aspects of Urban Modernisation [sic] in the Levant during the Nineteenth Century,” in *The City and the Railway in Europe*, eds. Ralf Roth and Marie-Noëlle Polina (London: Ashgate), 75.

along with Hirsch and other families, to establish the city's first Jewish schools and hospitals)³⁵¹ [Fig. 5.290].

The 1890 extension of the railway line eleven miles from the İstanbul suburb of San Stefano (Yeşilköy) [Fig. 5.291] to Eminönü at the northern edge of the historic city core seems to have been driven in equal parts by necessity and by the line's significance as the terminus for the Simplon Orient Express. To minimize the trace's interruption of the existing city fabric and the old city walls, the line was routed from San Stefano to a point not far east of the Galata Bridge on the Golden Horn, directly along the Marmara coastline, despite the Sultan's apprehension about coastal attacks [Fig. 5.292]. The coastal route necessitated a radical transformation of the European side of the city's face to the Marmara and Seraglio Point. The marshy shores at the foot of the fifth-century city walls on the Marmara were remodeled into a railbed. The railway stood precariously close to the water's edge before turning into its destination.³⁵² Naturally, this made for a stunning visual climax for the tourists on the Orient Express. In addition to its prominent face northward to Pera and Galata, Sirkeci became in and of itself an important public plaza with an intimate proximity to the waterfront and the ferries that docked slightly to the northwest. Sirkeci Square contributed to a revived sense of modernity in the historical district of Fatih and the Sultanahmet—which, since Sultan Abdülmecid I made the

³⁵¹ Ibid., 77. Also see, for its discussion of the Sayas family, Aron Rodrigue and Sarah Abrevaya Stein, eds., *A Jewish Voice from Ottoman Salonica: The Ladino Memoir of Sa'adi Besalel a-Levi*, trans. Isaac Jerusalemi (Palo Alto: Stanford University Press, 2012), 81.

³⁵² An excellent and comprehensive study of the walls can be found in Neslihan Asutay-Effenberger, *Die Landmauer von Konstantinopel-Istanbul: Historisch-topographische und baugeschichtliche Untersuchungen* (Berlin: Walter de Gruyter, 2007). Although Asutay-Effenberger does not discuss the train's planning in particular, a comparison with its contemporary situation reveals the contrast and the engineering efforts made.

decision in 1843 to relocate the royal palaces to north of the Golden Horn, had not played host to the city's architectural or technological innovations.

5.11.4 Ankara, Konya, Ereğli, Bekdemir, İskenderun

Ankara's meteoric rise from a sleepy agricultural center to the capital of the Turkish Republic is almost exclusively attributed to Atatürk's desire to locate the republic's capital centrally within the country's new borders and to stress its Anatolian character, all the while breaking with İstanbul's vexed political history.³⁵³ To be sure, Ankara fulfilled the geographical and psychological desires for the new capital, but the railway's presence in the city since 1890, fostering its growth and prominence, is widely overlooked as a factor in the city's selection. The planned railhead in Ankara, one mile to the southwest of the city's historic core, would facilitate a tremendous amount of commerce and growth without interrupting an expansive tabula rasa city plan [**Fig. 5.293**]. Moreover, no city had a grander İstasyon Cadessi than Ankara's, which could facilitate a ceremonial artery in and out of the city. Nevertheless, while the station remained the regional terminus that it was designed to be, it stayed largely disengaged from the urban fabric of the city, serving instead as a suburban hub intended nearly exclusively for commercial traffic.

No city is more recognizable as a total urban project born of the railway network than Konya. The project included the modern German-run Baghdad Hotel (Bağdat Oteli)

³⁵³ İstanbul was not desired as a capital, and many advocated for a new central capital at Kayseri, which did not have a rail link. Eskişehir would have also been conceivable, but it was occupied by Greek forces in the period immediately following the war.

[Fig. 5.294] and countless commercial and industrial facilities. A 1905 report in *The Times* offers a vivid image of the activity, with evocative impressions shared by many Europeans traveling the railway for the first time:

Konia [sic] ... would probably make a poor enough impression on one coming direct from Europe. The houses are almost all built of mud bricks, and most of the streets are more or less unpaved. But to reach it after a journey of some weeks in the interior is to feel that one is on one's way back to civilization. There are excellent roads, lined with trees, leading from the station to the town. Several public gardens, with kiosks for the sale of refreshments, have been made in the suburbs, and these combine with the many well-built schools and other public buildings to give Konia [sic] some faint resemblance to a European town. The progress to which the appearance of the city bears witness is almost entirely the work of the present Grand Vizier, Ferid Pasha, who was for some years Vali of Konia. In spite of the lack of money which is one of the besetting weaknesses of Turkish provincial administration, he managed not only to improve the police service and other branches of the administration, but to carry out many works of public utility. He provided the town with a supply of good water, the scarcity of which had been a cause of great suffering to the poorer classes, laid out new roads not only in the neighbourhood of the city but in the other parts of the vilayet as well, built new bazaars which have largely increased the income of the municipality, and founded a museum and several schools of which the most noteworthy is the technical college. We paid a surprise visit to the last establishment and were much impressed by what we saw. It has a well-equipped smithy and carpenter's shop as well as rooms for teaching, weaving and other trades. The teachers seemed capable and intelligent, and the work done by the pupils was good enough to show that their training had not been thrown away. The kitchen, dining room, and dormitories might, it is no exaggeration to say, serve as models for many schools in Europe. Unfortunately, funds are wanting for the proper maintenance of the college, and during the last few years its work has greatly suffered in consequence.³⁵⁴

The writer goes on to note the integral role of independent foreign corporate investments in this urban transformation, saying:

In Konia [sic], as everywhere on our journey, we were struck by the enterprise of the Singer's Sewing Machine Company. In every place of any importance it has an agency which not only sells machines at easy terms on the hire system but provides free instruction in their use both to private buyers and in the schools.³⁵⁵

The construction of the railway line just south of the city of Ereğli in Konya province is also emblematic of the railway's capacity for the transformation of urban

³⁵⁴ "The Land of the Antaolian Railway," *The Times*, October 3, 1905. Located in Ba R901/6667.

³⁵⁵ Ibid.

form. In addition to overhauling the sleepy village into a regional center for trade and agriculture, the railway's transformation of the entire urban fabric over the course of just a few years beginning in 1905 belied Ereğli's status as a mere second-class station. The railway approached the village, lying between Konya and Adana, from its south, maintaining an approximate distance of three kilometers from the old city center as it gently curved to the southeast. Punctuating the railway trace at a point due south of the historic core, the Ereğli station is surrounded, in addition to the standard stores and water tower, by a small, purpose-built village of two-story houses for the railway workers based in the area (augmenting the Konya facilities, which had reached full capacity) [Fig. 5.295]. The houses are laid out in an orderly row and are enclosed by the usual picket fences. The small community had, at first, a frontier quality and was connected to the old town by a grand, perhaps even overwrought, boulevard known today as İnönü Caddesi, for all intents and purposes a quintessential İstasyon Cadessi.

Reporting on Ereğli in September 1905, *The Times* noted "it is worthy of mention, as illustrating the difficulties with which the railway enterprise has to contend in the Ottoman empire, that the local authorities had not begun even to think of building a road from the town to the station."³⁵⁶ [Figs. 5.296-5.297] This, along with several observations about the boulevard that was ultimately built, indicates that after only a short period waiting for the local Ottoman officials to develop road infrastructure, the German engineers took matters into their own hands and spearheaded its construction. The boulevard, which led all the way to the old city, merges with the historic Karaman-Adana Yolu, a significant regional trade route that until the construction of the boulevard had

³⁵⁶ "The Land of the Antaolian Railway," *The Times*, September 30, 1905. Located in Ba R901/6667.

been the city's widest thoroughfare and the center of its commercial activities. The merging of the new boulevard ending at the station with an older trade route was perhaps an attempt—both literal and symbolic—to merge overland economic activity with rail activity and, in effect, facilitate an integrated approach to the urban growth that would inevitably follow the railway's arrival. The use of İnönü Caddesi as a connective commercial spine is underscored by the implementation of street furniture, including benches dotting the sidewalks, and prefabricated three-pronged gas street lamps imported from Germany lining the island in the center of the boulevard [Fig. 5.298].

And while the new part of the city grew rapidly, it enhanced and reemphasized some of the ethnic differences within. Virtually all of the houses and businesses established along the thoroughfare and near the German settlement were Christian businesses, particularly Armenian, whose proprietors erected a number of impressive villas that flaunted the city's new wealth, wealth that appeared to have bettered the lives of the Armenians more than anyone else and connected them with the resident German community.³⁵⁷

Although the desired trace of the railway was value-engineered to *not* penetrate major population centers intentionally, it did, on occasion, come into a head-on collision with minor population centers where it was more problematic to skirt a town or village than simply to penetrate it on the easiest possible topographic contour, even if that meant dislocating a handful of people (a prospect that the Ottoman government typically

³⁵⁷ Ibid. "[Ereğli] boasts ... several hans and even a small but comfortable inn, which came into existence to supply the wants of the engineers and others who the work of constructing the rail brought to the place." See also C. E. Heathcote-Smith to N. R. O'Connor, Aleppo, July 17, 1907, NA FO 881/9437. One prominent example is a lovely large wooden villa built near the station on İnönü Cadessi for a wealthy local Armenian family around 1890. Today it is a boutique hotel known as the Özkoçlar and has suffered from overdone renovation.

handled on behalf of the railway companies involved). Nowhere is this clearer than in Bekdemir in Bilecik Province, a tiny hamlet between Bilecik and Eskişehir on the Anatolian Railways. Immediately after traversing a tributary of the Sakarya River on an even contour seen in the topographic plans of the Deutsche Bank archives, the line plows the center of the hamlet into two, barely sparing its sole mosque, before boring through a large hillock [Fig. 5.299]. While neither German nor Ottoman records make clear what happened to the displaced buildings and their residents, the incision into the village fabric is obvious and uncompromising, channeling it with a horizontal column of stone and ballast almost fifteen feet high and, as one can imagine, introducing noise and pollution into the heart of the settlement. Berggren's photo shows the provision of a culvert that continues a single road from one divided side of the hamlet to the other.

The maritime outlet at İskenderun was exceptional in many ways. Despite Abdülhamid II's adamant resistance, for fear of an attack, to connecting the Baghdad Railway to the sea somewhere between İstanbul and Basra, the necessity of doing so was too great to be ignored. The proposal to create a rail-maritime link at İskenderun, historically a major Mediterranean outlet for trade from Baghdad and India, goes back to von Pressel, who proposed it in his schemes of 1873. Whereas von Pressel's plan proposed that the railway access the city from the south and loop around the city's southern edge before folding back onto the waterfront, and also supplanted the modest existing quay with a massive new one comprising two long moles and a breakwater, the scheme that took effect was far more practical and certainly less disruptive. Completed in 1913, the branch line connecting İskenderun to the main line at Toprakkale approached the city from the north and hugged the coastline in its final several kilometers. Unlike

Pressel's proposal, the railway did not enter the port directly but rather was situated near it at the northern edge of the city. A large plaza in front of the station amplified its presence in the city, and an unnamed street ending at the station attempted to connect the city directly to the water's edge, although it would never be completed [Fig. 5.300]. To the north of this street, a small *Siedlung* of bungalow-style houses, similar to those found in Adana, provided accommodations for railway officials and workers and were parceled and delineated from the rest of the city by, of course, picket fences [Fig. 5.301]. Despite the outbreak of war, the construction of the connection at İskenderun reinvigorated much of the trade and livelihood the city had lost some decades prior with the construction of the Suez Canal. As a result, the urban growth that ensued was primarily industrial and occurred around the station and its facilities and along a corridor nestled between the railway and the Mediterranean waterfront.

5.11.5 Notes on the Urbanism of the Hejaz Railway and Palestinian Tributaries

There are several significant differences between the effects of the European, Anatolian, and Baghdad railways on their cities and those engendered by the Hejaz Railway. The distinct political and religious character and more heterogeneous Ottoman workforce of the Hejaz Railway and its siting in a less secure environment ultimately rendered the Hejaz railway the most urbanistically disengaged. Indeed, there was often no engagement with urban fabrics, partly because the railway was treated like a military operation and thus resembled an autonomous fortified intervention and partly because it often touched down in locations that neither had nor intended to develop settled

populations, although there are a few exceptions, particularly in the established settlements of Arabia and Transjordan and the Palestinian tributaries. In Arabia, city plans are particularly hard to come by, but aerial photographs clearly show the isolation of many of the Hejaz Railway's station sites and document why they were never considered as elements of urban or village fabrics [Fig. 5.302].

5.11.6 Jaffa and the Production of a New Architectural Palette

The port of Jaffa presented a set of exceptional urban conditions when the construction of the Jaffa-Jerusalem railway line began in 1890. Along with Haifa and Jerusalem, Jaffa was one of only three cities within the entire Ottoman railway network where a proper German Templar colony preceded the railway's construction. Not surprisingly, the railway's trace was brought into an adjacency with the colony (which had become interspersed with a colony of Americans) when it was completed in 1892 and was thus brought into its greater economic fold [Fig. 5.303]. The railway at Jaffa did not penetrate the historic Arab quarter to connect with its lively port, although it remains unclear whether this was because the engineers and local officials decided the railway should not penetrate the historic city walls on conservation grounds or because it simply was not desirable. Regardless, the station and its environs to the north made for an almost surreal tabula rasa landscape and played an immense role in driving the development of the city northward, particularly with the more "modern" Zionist and Christian settlers coming from abroad [Fig. 5.304]. Despite the station's indirect contact with the waterfront, during construction a temporary winding narrow-gauge rail was built all the

way to the seafront and onto an temporary pier where materials could be directly loaded from ships [Fig. 5.305].

The formation of a family-run concrete and tile factory immediately adjacent to the Jaffa railway station by the entrepreneur and *Tempelgesellschaft* member Hugo Wieland is an example of the wider material influence the railway had on urban appearances. Wieland had moved with his family from Germany to the Templer Colony in Jerusalem in 1871 at the age of eighteen. He relocated to Jaffa in 1900, and in 1902 he constructed a one-story house immediately opposite the railway station along the end of the tracks. In 1905, Wieland built a factory to the east of the railbed and founded a company that produced floor and roof tiles, prefabricated Jerusalem-stone cement bricks [Fig. 5.306], decorative interior tiles, concrete piping, and other building materials made from cement, which Wieland imported from Germany and the United States. In 1906, Wieland used materials from his factory to expand his own house to two stories [Fig. 5.307]. The building products proliferated in new construction across Palestine until the outset of World War I, and are particularly evident in the German colony of Sarona, just north of Walhalla. Here the stone blocks and cement window frames and roof tiles mark a significant departure from the conventional architecture of the German colonies in Palestine, which tended to employ rough-hewn Jerusalem stone and local roof tiles³⁵⁸ [Fig. 5.308]. The overall appearance of these new buildings, while generally in line with the formal conventions that preceded them, demonstrate the mechanization of the

³⁵⁸ Helmut Glenk with Horst Blaich and Manfred Haering, *From Desert Sands to Golden Oranges: The History of the German Templer Settlement of Sarona in Palestine, 1871–1947* (Victoria, BC: Trafford, 2005), 49–50; Ganyah Dolev, *Gilgulega shel Utopyah: Ha-Templerim be-Erets Yiśra'el 1868-1948* (Tel Aviv: Muze'on Erets-Yiśra'el, 2006), 89, 95, 160. The site is currently a fashionable redeveloped outdoor shopping center.

colonial building process and the effect it had in transitioning architecture from rustivating tendencies to clean plastered surfaces and mass ornamentation. One particularly interesting piece of architectural ornamentation found on the Wieland house, most of the buildings built on the station grounds, and countless buildings constructed in Tel Aviv (north of Jaffa) between 1906 and 1914 is a small double-faced metal figure attached to brackets used to secure shutters in place [**Fig. 5.309**]. When the shutter is open, the face of a man faces forward, and when it is closed, the face of a woman can be seen, which might depict the Wielands themselves.

5.11.7 al `Ula, Medina

The construction of the railway station at al `Ula, about halfway between Tabuk and Medina, clearly illustrates the challenges posed by the harsh climatic conditions of the desert as well as the political unrest found there. Although still a settled community, al`Ula had been in decline since the early medieval period and had assumed something of a semitransient quality. As such, the railway station and its depots, stores, and housing facilities were laid approximately seven miles to the northeast, where the station was fortified and doubly protected by another fortified outpost on a neighboring hill³⁵⁹ [**Fig. 5.310**]. The railway campus enclosed by the walls resembles a small city, and as many steps as possible had been taken to not rely on the surrounding infrastructure. As such, the railway campus included the same provisions as many of the campuses of the Hejaz: water and food stores, garrisons, wells, and so on. The small railway community

³⁵⁹ Nicholson, *Hejaz Railway*, 90–91.

remained largely divorced from the daily life of the Arab city to the southwest and reinforced the railway's military and political posture in place of civic engagement.

The Medina terminus was the most successful of the lower Hejaz railway stations on an urbanistic level, as evidenced by the openness of its architecture and the accompanying al Anbarya mosque and large public plaza. But its success is also evident in the planning of the Omar Ibn al Khattab Street connecting the station to the historic city, a broad boulevard that openly integrated the military zone near the station—including Ottoman barracks and the Egyptian kitchen—with the civic and religious zone adjacent to al-Masjid an-Nabawi (and adjacent to the site of the Prophet's house) [Fig. 5.311]. The axiality of the boulevard also clearly illustrates the purposive aspects of the railway's relationship with the holy cities.

5.11.8 German Inflections of an Ottoman Railway Urbanism

A 1915 map of its own urban rail centers produced by the Austro-Hungarian war office reveals a great deal about five decades' cumulative design logic of how cities relate to the penetration and layout of railways, and it is representative of Austrian as well as German planning strategies³⁶⁰ [Fig. 5.312]. The gridded map of thumbnail schemes is divided into two parts: Austrian cities and Hungarian cities. Each part contains a very large diagram of the capital and the layout of existing train lines. The remaining thumbnail diagrams are significantly smaller and are rendered in either small squares or

³⁶⁰ The map is located in the file OKa GsT TB909 and is undated, but it appears to be from around 1915 and—given its location—was probably used during the war for logistical purposes.

slightly larger rectangles. All Hungarian cities other than Budapest are rendered in small squares, whereas a handful of Austrian cities, such as Trieste (Triest), Ljubljana (Laibach), Prague (Prag), and Brno (Brünn), appear in larger rectangles, implying their status as secondary rather than tertiary cities. The thumbnails decontextualize each city from its topographic and geographic context except for rivers, where bridges are also mapped. In the small and medium-sized boxes, the main station becomes synonymous with a city center (even if it wasn't in reality) through the placement of a dot. Occasionally, such as in Graz or Zagreb (Zágráb), multiple dots demarcate parts of the city separated at some point in its historical growth, thus rendering the city as a multimodal knot. The radiating lines signify the nearest city, and all of these, except international connections, refer to locales elsewhere on the map.

The map's pseudo-scientific approach to its subject reveals an abstract technicalism that was largely unique to rail planning in German and Austro-Hungarian cities. Whereas Western European and American railway planning tended to chart a railway's integration into a city center and the simultaneous development of an industrial periphery, the Austro-Hungarian map makes the argument that cities were only important insofar as they were networked and that the network had a distinct hierarchy of first, second, and third orders that remained fixed upon the completion of a city's railway. In other words, the railway defined a matrix of urban relationships as much as it clearly delineated a city's relative importance in economic, political, and perhaps even cultural terms. This three-tiered system, manifested explicitly in architecture, repeatedly appears in the spatial taxonomies of the Ottoman network and its cities, and the parallels need be considered to contextualize all of the growth and comparative aspects of Turkish cities in

its wake. Antoine Picon's contention that "urban cartography bore the mark of the industrial age" is here made paramount.³⁶¹

5.12 Conclusion

This chapter has reflected upon the most synthetic and material form of knowledge produced in tandem with the German construction of the Ottoman railway network: architecture and urbanism. It does this by establishing and exploring the concept of ambiguous transmutation, which argues that the unique semi-colonial nature of the German-Ottoman relationship established a framework for syncretic mutations in knowledge exchange, design and form that differ from the creative models typically recounted in the historiography of empires and colonial settings. Ultimately, it suggests that ambiguous transmutation marked a dialogic framework of European, and specifically German cultural expansionism that instructively outlines how ambiguity itself took on a dynamic role as a mediator and shaper of knowledge exchange and built form.

Ambiguous transmutation is established as a process facilitated by two general domains: ethnicity, religion and race and legal and administrative process. These domains bear out the possibility of the German and occasionally Ottoman authorial openings which were facilitated in the process through a close examination of a constellation of structures related to the railways of Ottoman Europe, the Anatolian Railways, The Hejaz Railway and its Palestinian tributaries, and the Baghdad Railway. To demonstrate the diffusionist effects of the both the railway as a political catalyst of form as well as a

³⁶¹ Antoine Picon, "Nineteenth Century Urban Cartography and the Scientific Ideal: The Case of Paris," *Osiris* 18 (2003): 138.

promoter of the ambiguous transmutation process, this chapter further examines a broad swath of monuments and buildings affiliated with the railway that, be it through geopolitical strategy or tactical ingenuity, instantiate the ambiguous transmutation process and codify the geostrategic substrate of the German-Ottoman relationship. Finally, the chapter briefly evaluates the production of urban form and urban plans in conjunction with the railway, demonstrating how they paralleled and differed normative German colonial models of urban structuring. Seen together, this extended segment provides a methodological provocation in concert with empirical evidence and conceptual suggestions that formulate the synthetic nature of the fifth and final form of knowledge produced through the German construction of the Ottoman railway network.

CONCLUSION

Theodor Wiegand's reminder to the engineers of the Baghdad Railway that theirs was a project ripe for the production of knowledge above and beyond the infrastructure it created proved correct as well as transposable, as this dissertation has illustrated through both textual sources and analyses of a constellation of visual material. Wiegand's call to arms to the men of the Baghdad Railway to create knowledge *in addition to* building a railway epitomizes what some might call the acquisitiveness of the latter half of Europe's long nineteenth century—procuring images, experience, and ultimately, dominion.¹ Viewed in this light alone, the German construction of the Ottoman railway network would appear to be a typical imperial endeavor, replete with the attendant narratives of power, manipulation, and coercion that characterize imperial history.

This dissertation suggests this as a possibility, but also avidly attempts to problematize it by introducing a number of discrete conceptual leitmotifs. Foremost among them is the critical matter of expertise. The terms “expert” and “expertise” are commonly deployed in describing historical as well as contemporary production processes in architecture and construction. As traditional narratives go, the internal religiously-driven architectural production of the medieval and early modern Islamic world ended sometime around 1800, when Europe's impact on the Islamic world became

¹ This description draws upon the memorable characterization of the century by R. H. Tawney in *The Acquisitive Society* (New York: Harcourt, Brace, 1920). Tawney notes (p. 99): “Even sensible men are persuaded that capital ‘employs’ labour, such as our pagan ancestors imagined that other pieces of wood and iron, which they deified in their day, sent them their crops, and won their battles. When men have gone so far as to talk as though their idols have come to life, it is time that someone broke them. Labour consists of persons, capital of things. The only use of things is to be applied to the service of persons.” In this sense one can argue that modernity and the technicalism associated with it are an illusion, merely a spatiotemporal rubric to explain what is unique to the so-called modern era: hyper-acquisitiveness. Erich Fromm also touches on Tawney in his important work *The Sane Society* (New York: Rinehart, 1955), 216–18.

characterized more by force than by affinity.² The dynamic internal forms of expertise that had existed in the Islamic world, ranging from mathematics and geometry to the mastery of certain crafts like metalwork, tile production, and masonry, faced enormous external pressure that rid the arts of Islam of their (supposed) purity. As several have argued, this transmutation of European modernity, as it is known, subjected most of the Islamic world to political and psychological pressures that stymied intrinsic expertise and the monolithic notions of autonomous, universal, and divine creativity.³ Historians with an eye toward the twentieth and twenty-first centuries have more broadly described this process under the rubric of “globalization,” a system where access to expertise became open to so many so readily that its structure merely mimicked capitalist culture writ large with its tendencies towards designification, mimesis, mechanical reproduction, and ubiquity.⁴

The periodization (“apex” vs. “decline”) and characterization (“autonomy” vs.

² Some have convincingly argued that expertise was a key entity of the so-called administrative revolution. As Roy MacLeod has suggested, there was “a cycle of ‘expertise’ itself, which became vital in the process of legislation and the practice of statecraft. This executive capacity for ‘expertise’ at first acknowledged, then embraced, and later routinized specialist knowledge, made useful to government by its relevance to ‘social problems’.” In this discourse, power passed increasingly to the ‘agents of knowledge’, wearing the badge not of birth but of merit; acting beneath the flurry of domestic politics and foreign affairs, through a poppy field of new administrative boards, commissioners and inspectorates.” See Roy MacLeod, ed., *Government and Expertise: Specialists, Administrators and Professionals, 1860–1919* (Cambridge: Cambridge University Press, 1988), 5.

³ Hodgson, *Venture of Islam*, 3:176–208.

⁴ I borrow this characterization of the proliferation of form in images in modern times from Walter Benjamin, in particular his seminal work “Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit,” *Zeitschrift für Sozialforschung* 5, no. 1 (1936), 40–68. Benjamin argues that technology, with its capacity and penchant to reproduce images and things, has for the first time in history quashed the relationship of the practice of art to ritualized beliefs and activities. Many theorists and historians have noted the importance of Benjamin’s work and this concept for understanding the production of images and objects in the early globalizing and globalized era.

“dependency”) traditionally used to describe such transformations have been duly challenged in recent scholarship, but rarely with an eye toward the immensely important and mutable notion of what expertise means to those it impacts on a day-to-day basis. Furthermore, the meaning of the term “expertise” is markedly devoid of a critical perspective. Defined as comprehensive and authoritative knowledge of or skill in a particular area, it is clearly tethered to the entanglement of power and knowledge at the core of postcolonial studies, yet its inherent function in real world applications and, above all, technical design and planning matters has curiously exempted it from the scholarly scrutiny directed toward other economies of knowledge since Foucault and Said’s reframing in the 1960’s and 1970s.

Contemporary thinkers from other humanistic fields have suggested a new sociological paradigm of interactional expertise that generates knowledge through transactional and multilateral engagement, while others theorize expertise as a system of knowledge management and contend that expert knowledge has no single source (such as a monolithic “West”).⁵ This dissertation suggests, through an orchestrated and careful analysis of sources, ways in which these novel conceptions of expertise, as shaped by experience and not by definition, may help characterize the German-Ottoman engagement and how that specific relationship fits in with contemporary models of imperialism, colonialism, and the processes of technicalism and ambiguous transmutation introduced in this study.

The German engineers, architects, financiers, and bureaucrats who over the course of more than a half century surveyed and led the construction of the railways of

⁵ These novel concepts and their proponents are outlined in Harry Collins and Robert Evans, *Rethinking Expertise* (Chicago: The University of Chicago Press, 2007).

Ottoman Europe, the Anatolian Railways and the Hejaz and Baghdad Railways actualized and shaped a multilateral consortium of expertise with a mandate, at times tacit and at times explicit, to produce and form cultural knowledge. This mandate has hitherto been hidden behind the individual histories of these railways and framed in political and economic terms alone, particularly given their lack of interest in the array of visual entities produced for and through the railways' gestation. To be sure, the political and economic histories of the intense German involvement with the construction of the Ottoman railway network are the histories whose importance is the most obvious. Yet the primacy that has been placed on them by scholars writing across four languages has obscured the truly synthetic nature of the cultural production materialized by the railway.

This dissertation has parsed this production in the context of five discrete forms of knowledge: political, geographic, topographic, archaeological, and architectural and urban. The middle three of these—geography, topography and archaeology—are directly inspired by Theodor Wiegand's pamphlet introduced at the beginning of this study and are epistemological fields that we may be certain the German parties involved in the construction of the Ottoman railway network sought to develop. The last category—architecture and urbanism—expands our understanding of this historical event by including the intrinsically intertwined production of architecture and cities in the process. Through the synchronic analysis of textual and visual records as well as a first-hand inspection, description, and analysis of objects, this dissertation argues that the German construction of the Ottoman rail network provides a new paradigm for greater understanding of ambiguous and atypical cross-cultural interactions in the modern era, be they semicolonial in the Marxist sense or more generally deviant from colonial and

imperial paradigms. Whether this has a bearing on contemporary supranarratives exploring the relation between globalization and colonialism is left to the reader to decide.⁶ This dissertation is not, in that sense, a manifesto. Rather than privilege a verdict on this question, this dissertation situates itself in the very ambiguity that characterized the German-Ottoman relationship and the expertise it ostensibly needed to employ. This will serve, it is hoped, as a new paradigm, one that this dissertation provisionally describes as ambiguous transmutation, inspired by Marshall Hodgson's conception of transmutation: a material-based way of understanding the immense excitement, duress, and morphological ruptures of the "East-West," "European–non-European" engagement at the dawn of a globalizing world order.⁷

The concept of ambiguous transmutation is fleshed out in this dissertation specifically through the analysis of architectural and urban form, although the concept can also help situate and understand material and visual productions within the other genres of knowledge suggested by Wiegand's seminal pamphlet: geographic, topographic, and archaeological. The concept also affords a new understanding of the established political history by privileging unexpected material and the formal manifestations of politics itself. Train stations constitute but one of several types of objects that provide evidence; so too do maps, surveys, political cartoons, memorabilia, photo and commemorative albums, postcards, workers' housing and barracks, bridges, tunnels, culverts, houses, hospitals, heirlooms, memorials, grave sites, expedition tracts,

⁶ A useful volume regarding the relationship between colonialism and globalization is Silvia Nagy-Zekmi and Chantal Zabus, *Colonization or Globalization? Postcolonial Explorations of Imperial Expansion* (Lanham, MD: Lexington Books, 2010).

⁷ Hodgson, *Venture of Islam*, vol. 3, esp. 176–208.

esoteric inscriptions, ruins, travel journals, and numerous others forms of documentation and constructed objects. The extensive multinational and multilingual archival work of this dissertation is a testament to the fecundity of the scholarly conviction behind it, one committed as much to bringing forth evidence as it is to furthering critical inquiry.

Beyond what the information this broad analysis reveals about the process of ambiguous transmutation itself, it also elicits broader psychosocial and conceptual themes, the introduction of which are well served by Bruno Latour's motif of the Gordian Knot (an intractable problem solved only by thinking outside the box), a mythic geometric figure which incidentally refers to the site of the ancient Phrygians visited by the German archaeologists and railway engineers introduced in Chapter Four.⁸ Latour argues that modern culture relinquished "primitive" (read premodern) problems through technology without actually solving them. To retie the Gordian Knot is, for Latour, a way for humankind to have recourse to nature, a recourse that resists the ambivalence that technology furnishes.⁹ As Latour describes it:

Whatever label we use, we are always attempting to retie the Gordian knot by crisscrossing, as often as we have to, the divide that separates exact knowledge and the exercise of power – let us say nature and culture. Hybrids ourselves, installed lopsidedly within scientific institutions, half engineers and half philosophers, '*tiers instruits*' without having sought the role, we have chosen to follow the imbroglios wherever they may take us. To shuttle back and forth, we rely on the notion of translation, or network. More supple than the notion of system, more historical than the notion of structure, more empirical than the notion of complexity, the idea of network is the Ariadne's thread of these interwoven stories.¹⁰

⁸ Bruno Latour, *We Have Never Been Modern* (Cambridge, MA: Harvard University Press, 1993), 5-8.

⁹ Ibid., 5.

¹⁰ Ibid.

Beyond the parallels that the act of “crisscrossing” has to moving through nature in a locomotive and the fact that the railway was a network in the purest sense of the term, Latour’s Gordian Knot also forces us to consider these matters as necessarily part of a political and discursive apparatus. He goes on to state:

Yet our work remains incomprehensible, because it is segmented into three components corresponding to our critics’ habitual categories. They turn it into nature, politics, or discourse.¹¹

This depiction of “modern” men and women as actors “lopsidedly” installed in institutions as “half engineers and half philosophers” exemplifies the concept of ambiguous transmutation: an irony as much as it is a productive duality that relies on the substructure of a network. Latour’s critique is that “modern” men and women fail to recognize the consonance of their environment and their modernity, and rather assume that the two operate one against the another. The *process* of ambiguous transmutation historicizes Latour’s philosophical construct, arguing that the whole duality of the “half engineer and the half philosopher” was latent in the men and women producing the Ottoman railway network and its “exact” forms of “hybrid” knowledge, precisely as a result of the imprecision of its geopolitical context: ambiguous, and in that sense non-modern (despite its “modern” cause).

This non-modernity of the German-Ottoman partnership¹², in the sense that it did not match the modern political status quo of bilateral relations of its time, or in other words its ambiguity, is precisely what made it come closer than any contemporaneous model to reconciling politics and nature across cultures and, ultimately, to retying the

¹¹ Ibid.

¹² Just one aspect in which this is manifest is the complete exclusion of an avant garde figure from this study.

Gordian Knot. Although aesthetic programs or legibility can be identified across the *things* examined in this dissertation, they are hardly the products of dogma or ideology as they would be in other settings at other times.

Placing the broader construction of the Ottoman railway network in its political and historical context, Chapter One introduces an operative and materialist lens through which to understand the railway in its geopolitical guises. Chapter Two, in its study of the allied geographic knowledge produced by the German construction of the Ottoman rail network, illuminates how the German cultural incursion in the Ottoman empire, under the auspices of “disinterested” science, forged an epistemological agenda that alternately sponsored colonial and genuinely scientific pursuits, pursuits that intermingled far more often than previously thought. Chapter Three’s analysis of the German pursuit of a topographic knowledge of Arabia, Mesopotamia, and Anatolia illustrates the particular hold German *Wissenschaft* had on the framing and formation of modern networks within the empire and demonstrates how the German-led railways actualized those networks to ends that served both Ottoman and German interests—which were consonant as often as they were in opposition. Chapter Four, in its consideration of archaeology, explains not only the collusive role archaeological practice played in tandem with the German construction of the Ottoman railway network, but also the ways in which it cleverly mediated notions of the earth with notions of cultural property and cultural heritage. Finally, Chapter Five embarks on an extensive synthetic analysis of several architectural and urban entities—stations as showpieces, stations as morphologies, strategic and tactical monuments, and city plans—and seeks to derive an emancipatory meaning from something that typically does not offer it: ambiguity. The ambiguous colonial nature of

German expertise in the architecture, engineering, and urbanism of the late Ottoman empire is what makes it at once unique and instructive, and this chapter argues that the ambiguous transmutation evident in the forms built by German parties for the Ottoman railways presents a dialogic model of European cultural expansionism that can expand both our understanding of nineteenth- and early twentieth-century European architecture in the world at large, the fashioning of a German imperial image abroad, and the origins of distinctly twentieth-century architectural movements in the Ottoman empire, among other things.

Within this dissertation's thematic division of its subject matter, there also emerge affinities of media. Much of the content of Chapter One, on politics, draws on archives and the genre of the political cartoon. The vast majority of Chapter Two, on geography, relies on expository writing and geographic documentation, while Chapter Three, on topography, relies heavily on maps and methods of mapping more generally. Chapter Four, on archaeology, naturally relies on artifacts, while Chapter Five, on architecture and the city, relies on the buildings, monuments broadly defined, and urban form. In this way, media codify Wiegand's divisions of knowledge as much as the disciplines through which he framed his call to the engineers.

The five chapters of this dissertation offer insights into the motives, methods, and artistic goals of the German and Ottoman agents as well as the extranational agents involved in the railways' gestation, and broader findings emerge from these insights. First, a burgeoning awareness of the interdependency of modernity and secular rationalism with geopolitical strategy is manifest. That is, in this ambiguous context, there was a world-historically relevant and unprecedented prefiguration of technical expertise as the

ground, at least at face value, *for* a spirit of multicultural parity that nonetheless operated in the highly calculated geopolitical machinations of the day.¹³ As Marchand has noted, this spirit was one of immense potential:

Had the Weimar era gone on, it is possible that German orientalism would have evolved more fully in the direction of what we now call multiculturalism. It had many of the makings of such a worldview... there was already a powerful understanding of the Eurocentric nature of conventional history-writing and the unsuitability of western models and norms for understanding the cultures of the East. There was an appreciation of the ways in which Europe was, for most of recorded history, the weaker continent, and of how many myths, ideas, inventions, and practices... Europeans owed to the Orient.¹⁴

Ultimately, however, inherent limitations prevented German orientalist knowledge from fully bearing out the modern multicultural paradigm, noting that the inability "... was the result of [the] deep [German] immersion in the Christian and classical traditions and the attendant prejudices and institutional barriers that made thinking outside these boxes difficult and fraught with peril – as well as exhilaratingly iconoclastic."¹⁵

A result of this shortcoming, situating the German-Ottoman partnership as one halfway between hegemony and equanimity, is a second and synthetic finding: the development of a new paradigm of the power/knowledge genre that places a primacy on the transnational "expert" in the production of architecture, engineering, and urbanism in an early globalizing world order. Because the operative framework of expertise appears to have had the same immunity in practice between 1868 and 1919 as it does today in historiography, the technical "expert" (as opposed to the King, the prince, or the Sultan)

¹³ I refer here to both definitions, largely at odds, of "geopolitics": that of Friedrich Ratzel as well as the more general contemporary definition of geopolitics as the interrelationships of states as they relate to the natural entities that do not honor state borders: watersheds, oil deposits, pollution, etc.

¹⁴ Marchand, *German Orientalism*, 496.

¹⁵ *Ibid.*, 497.

emerges as a force of wholly underestimated and primarily tactical agency in the orchestration of global power relations. Technical experts, like railway engineers and proto-corporate architects, are rarely attractive figures for anchoring a historical or geopolitical polemic, in part because their biographies are pedestrian. Indeed, the banality of the specificity of their knowledge seems to be anathema to the grand visions and sweeping narratives within which they operated. This apparent paradox is what makes them so fascinating—and their retrieval from the margins of history so necessary.

Building on Marchand's line of argumentation, the railways' construction reveals general insights into the nonphilosophical origins of multiculturalist thought, multiculturalist dynamics and, in particular, into the important role of the construction in German as well as Ottoman intellectual histories. Because German technicalism and its allied experts came to their expertise without much political ideology or capital, the multicultural milieu that they coalesced in the construction of the Ottoman railway—both internal to Ottoman society and at the truly international level—spoke to a new multicultural (as opposed to cosmopolitan) sensibility, one that postdated the Enlightenment and its values yet preceded political correctness and *its* values, indicating an important intermediate step between the two and explicating their interrelationship with technology and the international economies of expertise.

Lastly, while the railways' construction operated primarily within geopolitical and economic imperatives and lacked highly conceptual or uniform aesthetic values, it nonetheless materialized a site for syncretic mutations in architectural and urban form. Rather than placing an emphasis on the description or formal value of those mutations—as art-historical methods are inclined to do—this dissertation goes one step further to

understand why they did occur and why others did not, and the processes behind them and their meanings, without diminishing their geopolitical and economic substrate. In doing so, this dissertation aims to serve an instructive function concerning culture's respective ways of negotiating change in form under the excitement and duress of modernity.

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Akşehir; 10 A-10/1, Afyon; 10 A-3/1-3, Adana; 10 A-5/1, 2, 3, 4, Alpu; 10 A-6/1, Adapazari; 10 A-4, Alayunt; 10 A-7/1, Akçakale; 10 A-21/1, 2, Bozüyük; 10 A-74/1, 2, Bilecik; 10 A-90/1, Ceylanpınar; 10 A-157/1, 2, 3 & 2G-171/1, Çumra; 2G-205/1, Dört Yol; 2G-267/1, Erzin; E/414, Eskişehir and Ankara; 10 A-290/1, 2, Etimesgut; 10 A-291/1, 2, 3, 4, 5, Fevzipaşa; 2G-347/2, Göztepe; 10 A-336/1, 2, Gebze; 10 A-337/1-10, Hamam; 10 A-388/1, 2, Prototypes for İzmit-Ankara Line; 10 A-441/1, İzmit; 10 A-443/1-20 & 2G-490/5, İskenderun; 2G-492/15, Kızıltoprak; 10 A-487/1-4, Kartal; 10 A-488/1-12, Konya; 10 A-492-1, 2, 3, Maltepe; 10 A-638/1, Malıköy; 10 A-641/1, 2, Mamure; 2G-719/1, Sapanca; 10 A-768/1, 2, Serçehan; 10 A-784/1, 2, Toprakkale; 10 A-854/1, 2 & 2G-976, Toruntepe; 10 A-862/1, 2, Ulukışla; 2G-154, Yenice; 10 A-940/1, Prototypes for the Cilician region; 10 A-154/1, 2, 3, 4, 5, 6, Karkamış; 2G-611/1, Nusaybin; 2G-752/1, Pozantı; 2G-820/1

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RG 318 (Baron Maurice de Hirsch & Wilhelm Loewenthal)

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VOLUME 2

ILLUSTRATIONS



Frontisp. I. Map of the German-Ottoman axis and related railways. Drawing of the author.



Frontisp. II. Engineer and assistants measuring and surveying in the Taurus range for the Baghdad Railway, c. 1916. Ullstein Bilderdienst 00091463.



Fig. 1.1. “Siege of Vienna by Süleyman I the Magnificent, 1529,” showing Ottoman and Austrian forces at the gates of Vienna. From Lokman, *Hünernâme*, 1588. İstanbul, Topkapı Palace Museum Library, Ms. 1524, fol. 257b.



Fig. 1.2. Map of telegraph lines in the Ottoman empire, 1874. AK DSCN5503.

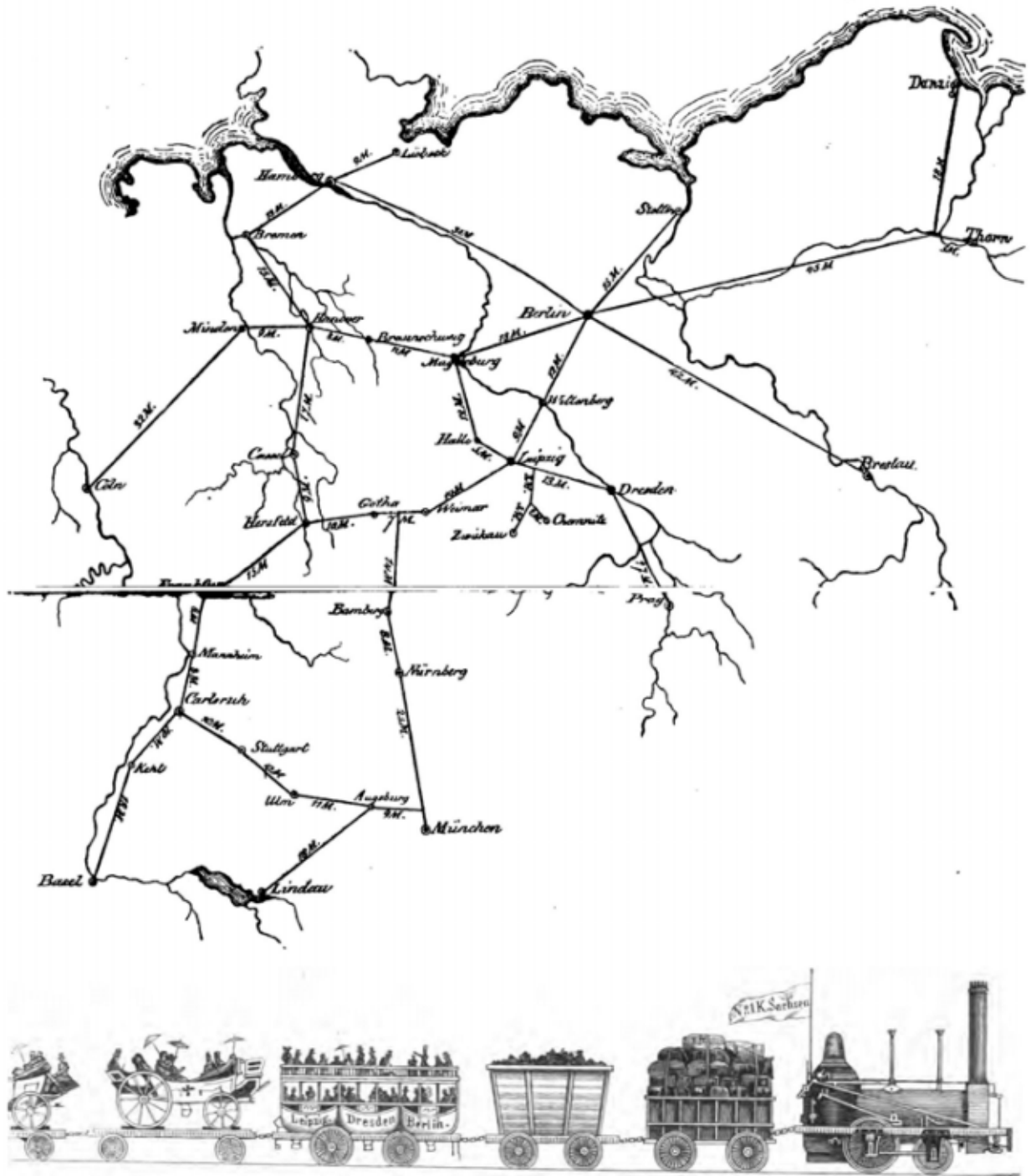


Fig. 1.3. Friedrich List's design for the German railway system, 1833. From Robert Krause, *Friedrich List und die erste große Eisenbahn Deutschlands. Ein Beitrag zur Eisenbahngeschichte* (Leipzig: E. Strauch, 1887).



Fig. 1.4. "S.T.B.," "Railway Station, Alexandria," 1857. VAM SD.905.



Fig. 1.5. Unknown designer, scale model of railway car designed for the French Empress Eugénie by Sultan Abdülaziz, c. 1868. AKM, inv. no. 216.



Fig. 1.6. Ali Rıza Pasha, Railroad station at Haydarpaşa, between 1880 and 1893, Abdul Hamid II Collection. LOC lot 9523, no. 28.



Fig. 1.7. Guillaume Gustave Berggren, view of grain silos at the port of İzmit, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.



Fig. 1.9. Garabed Krikorian, Railway station at Jerusalem during the opening ceremony, 1892. PEF P 2595.

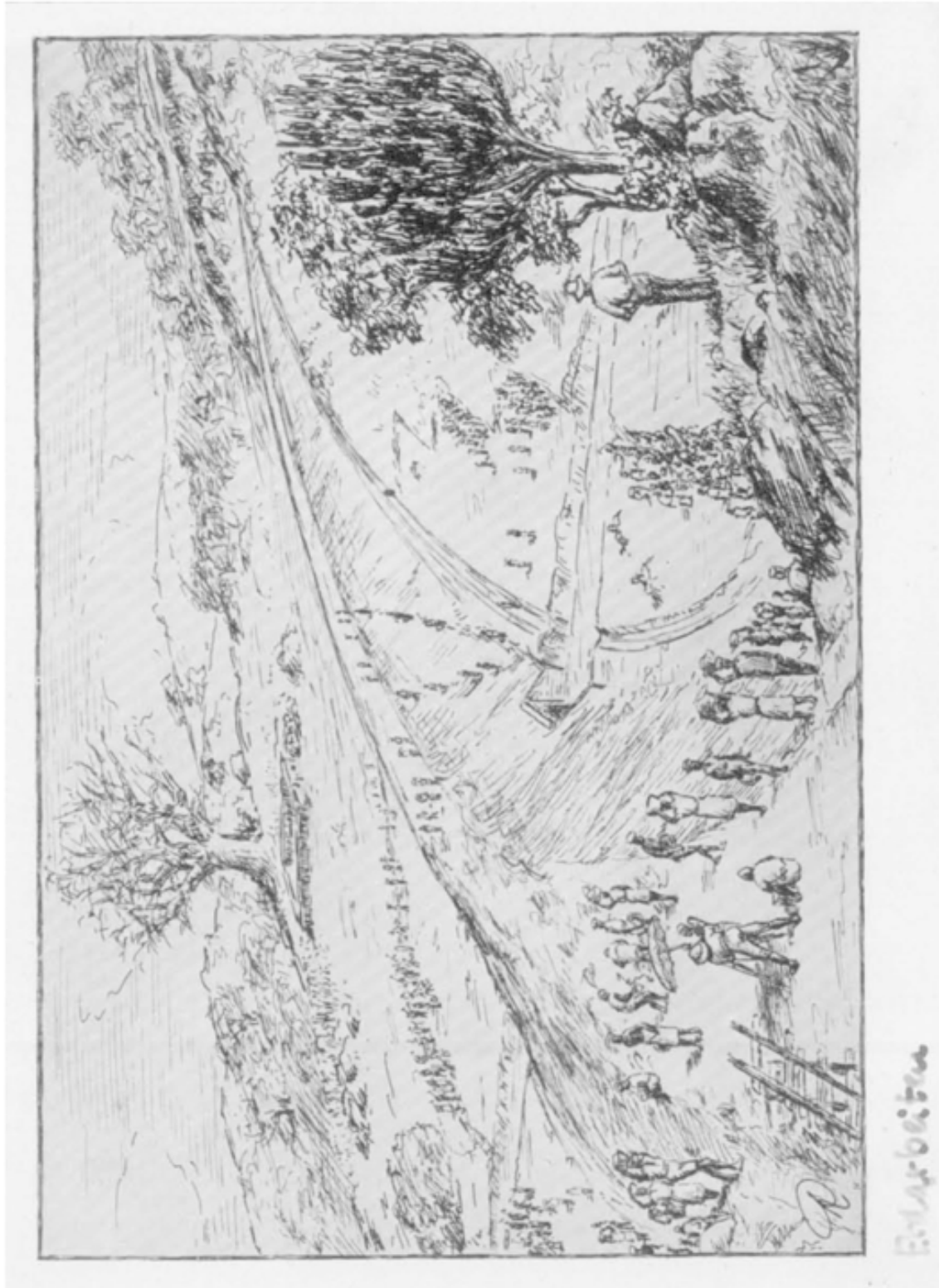


Fig. 1.11. Unknown, artist's interpretation of Philipp Holzmann GmbH's construction of the railway in German East Africa (Tanzania), c. 1896. ISg W 1/2 278.



Fig. 1.12. Fausto Zonaro, “The Arrival of Kaiser Wilhelm II at the Şale,” 1899, DPC inv. no. 11/1200.



Fig. 1.13. Kaiser Wilhelm and Empress Auguste Viktoria being received at the pavilion at Herke, 1898. IRCICA photograph archive, 90483-5.



Fig. 1.14. American Colony Jerusalem, Kaiser Wilhelm II and Empress Auguste Viktoria leading the royal cortege past the German Lutheran Church of the Redeemer in Jerusalem, Palestine, which they dedicated on October 31, 1898. LOC maptc.07341.



Fig. 1.15. Unknown, Kaiser Wilhelm at Baalbek with sacrificial lambs, November 10, 1898. Diab Alkarssifi.



Fig. 1.16. Hejaz railway medallion, front, 1900. SALT Research, İsa Akbaş collection. ANUDM00249.



Fig. 1.17. Commemorative rail gauge, Hejaz railway, 1907. SALT Research, İsa Akbaş Collection, ANUY00019.



Fig. 1.18. Commemorative coins celebrating the Baghdad railway's crossing of the Taurus pass with German and Ottoman seals placed side by side, 1916. Yapı Kredi Koleksiyonu.



Fig. 1.19. Commemorative pill box depicting Abdülmecid, Wilhelm and the Grand Vizier. SALT Research, İsa Akbaş Collection, ANUY00036.



Fig. 1.20. Commemorative figurine depicting Abdülhamid II. SALT Research, İsa Akbaş Collection, ANUY00037E001.



Fig. 1.21. Commemorative figurine depicting Kaiser Wilhelm. SALT Research, İsa Akbaş Collection, ANUY00037.

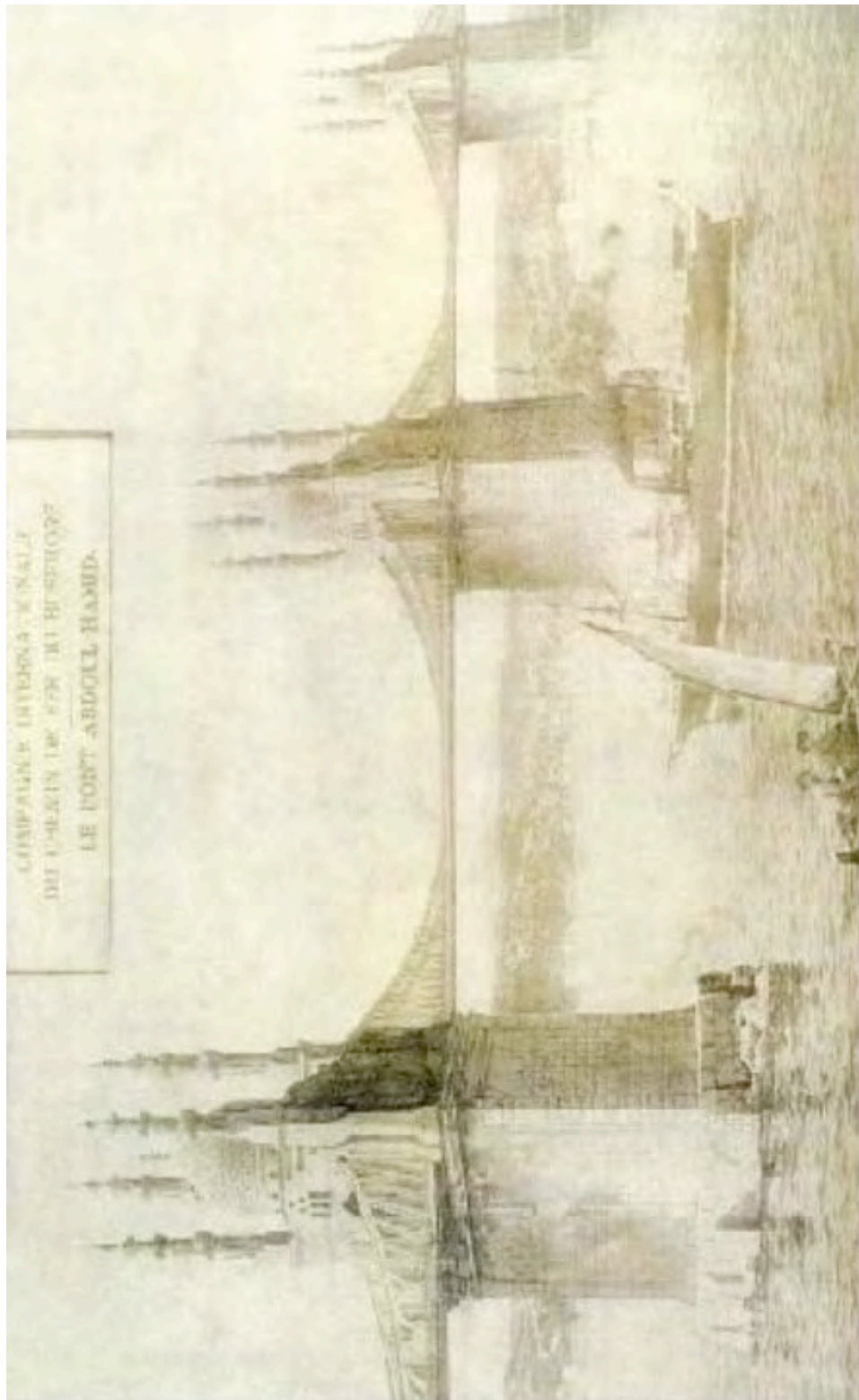


Fig. 1.22. Ferdinand Arnodin's proposal for the Kandilli-Rumelihisar bridge, 1900. BOA VA HUS 441/174.



Fig. 1.23. Unknown artist, Abdülhamid II depicted as a fountain in Berlin's Tiergarten in the comic journal *Daoul*. AAR 14.155.

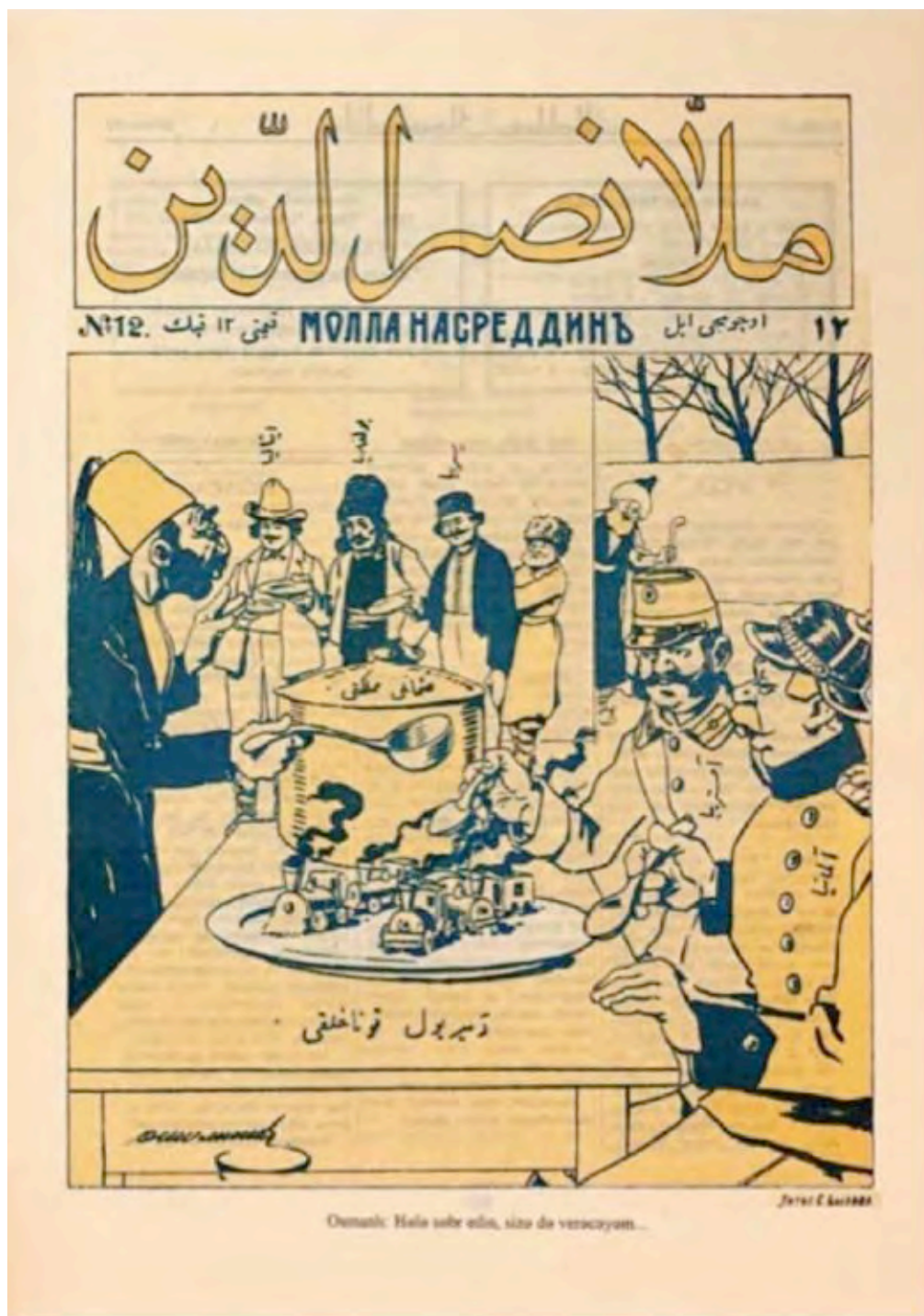


Fig. 1.25. Unknown artist, *Molla Nəsrəddin* / *Молла Насреддин* (Azerbaijan), vol. 1 no. 12 cover with satirical view of railway construction, 1907. The Ottoman government busily feeds Germany (left) and Austria (right) at a table while others (left to right: Italy, Bulgaria, Serbia) must wait. The train set refers to the Baghdad railway. The caption reads “Osmanlı: Hələ səbr edin, sizə də verəcəyəm.” (Turks: Be patient, we’ll serve you too.) Azərbaycan Dövlət Nəşriyyatı and Çinar-Çap Nəşriyyatı.



Fig. 1.26. Molla Nəsrəddin / Молла Насреддин (Azerbaijan) vol. 1 no. 9 cover with satirical geopolitical view of Ottoman foreign relations, 1907. An Englishman tips the scales to the right towards France (2 pounds), Russia (2 pounds), and Iran (1 pound). On the left side of the balance are Italy (4 pounds), Austria (3 pounds) and Turkey (2 pounds). The caption reads “Dövlətlərin müvazinəsi edin.” (The weight of various nations.) Azərbaycan Dövlət Nəşriyyatı and Çinar-Çap Nəşriyyatı.



Fig. 1.27. Molla Nəsrəddin / Молла Насреддин (Azerbaijan) vol. 3 no. 2 cover with satirical view of railway construction, 1909. The figure on the left represents “old traditions” while the figure on the right represents “old sciences”. The train is written as “progress” while “regression” is written on the back of the cleric’s head. The caption reads “Qoyunluq qabağa gedəsən.” (We won’t let you move forward.). Azərbaycan Dövlət Nəşriyyatı and Çinar-Çap Nəşriyyatı.

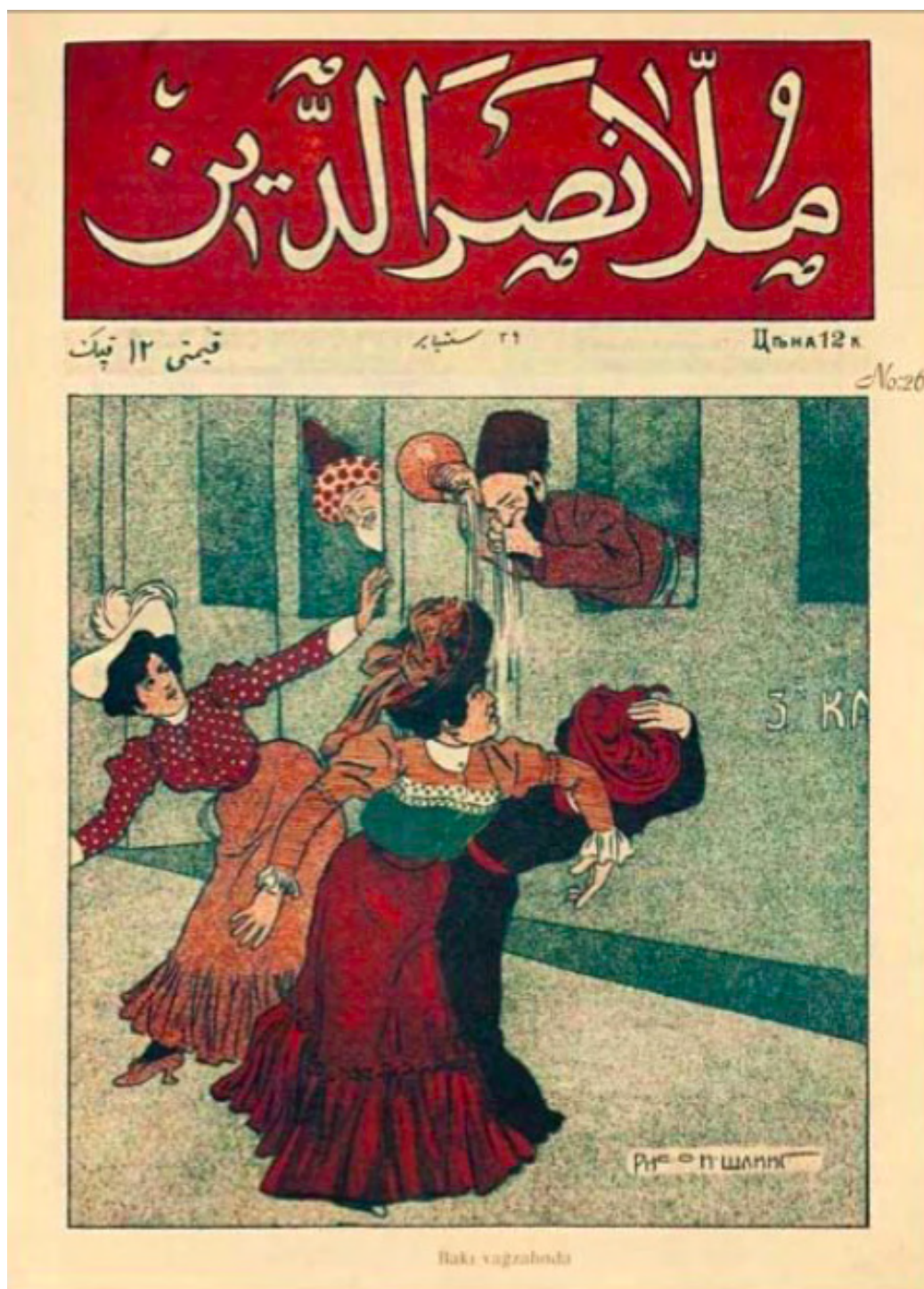


Fig. 1.28. Molla Nəsrəddin / Молла Насреддин (Azerbaijan) vol. II no. 26 cover with satirical geopolitical view of Ottoman foreign relations, 1910. According to an old Azei superstition, it is considered good luck to pour water behind oneself when travelling. Here, three European women on the train platform find themselves having water spilled upon them.. The caption reads “Bakı vağzalında.” (The train station at Baku.) Azərbaycan Dövlət Nəşriyyatı and Çinar-Çap Nəşriyyatı.



Fig. 1.29. Unknown artist, comical depiction of Georg von Siemens in İstanbul on the cover of *Lustige Blätter*, 1900.

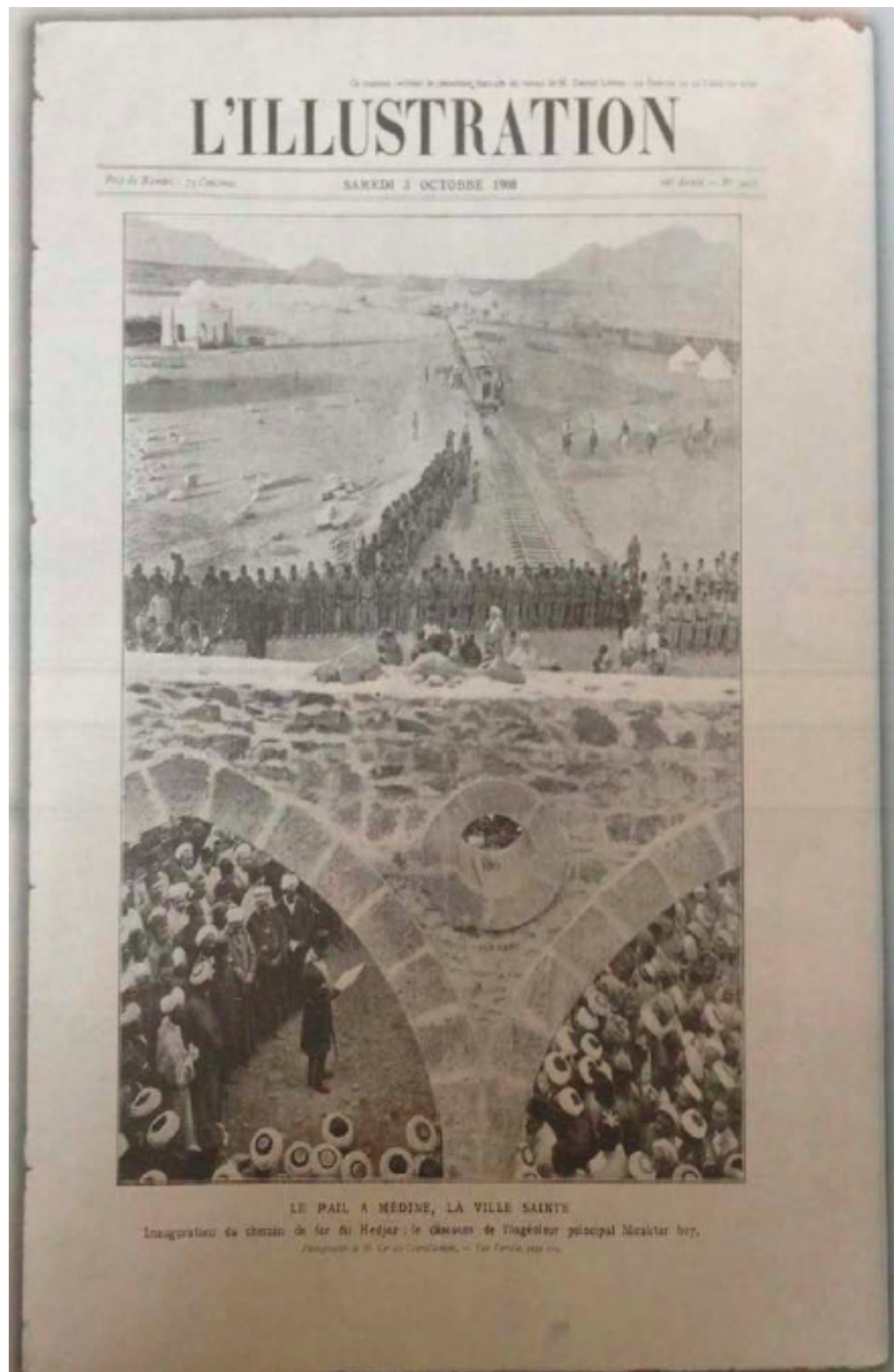


Fig. 1.30. Cover of the *L'Illustration*, October 3, 1908, depicting the inauguration of Medina station. Wikimedia Commons.



Fig. 1.31. Emil Heubusch, engineer of the Baghdad railway, photograph of a burnt Armenian woman in Adana, 1909. SAS.



Fig. 1.32. Unknown, view of German doctors treating Armenian children near the Baghdad Railway, c. 1916. Ullstein Bilderdienst 00630785.



Fig. 1.34. Austro-Hungarian Map depicting rail staging facilities in the Ottoman empire for war purposes, 1916. OSa Kt. 908.

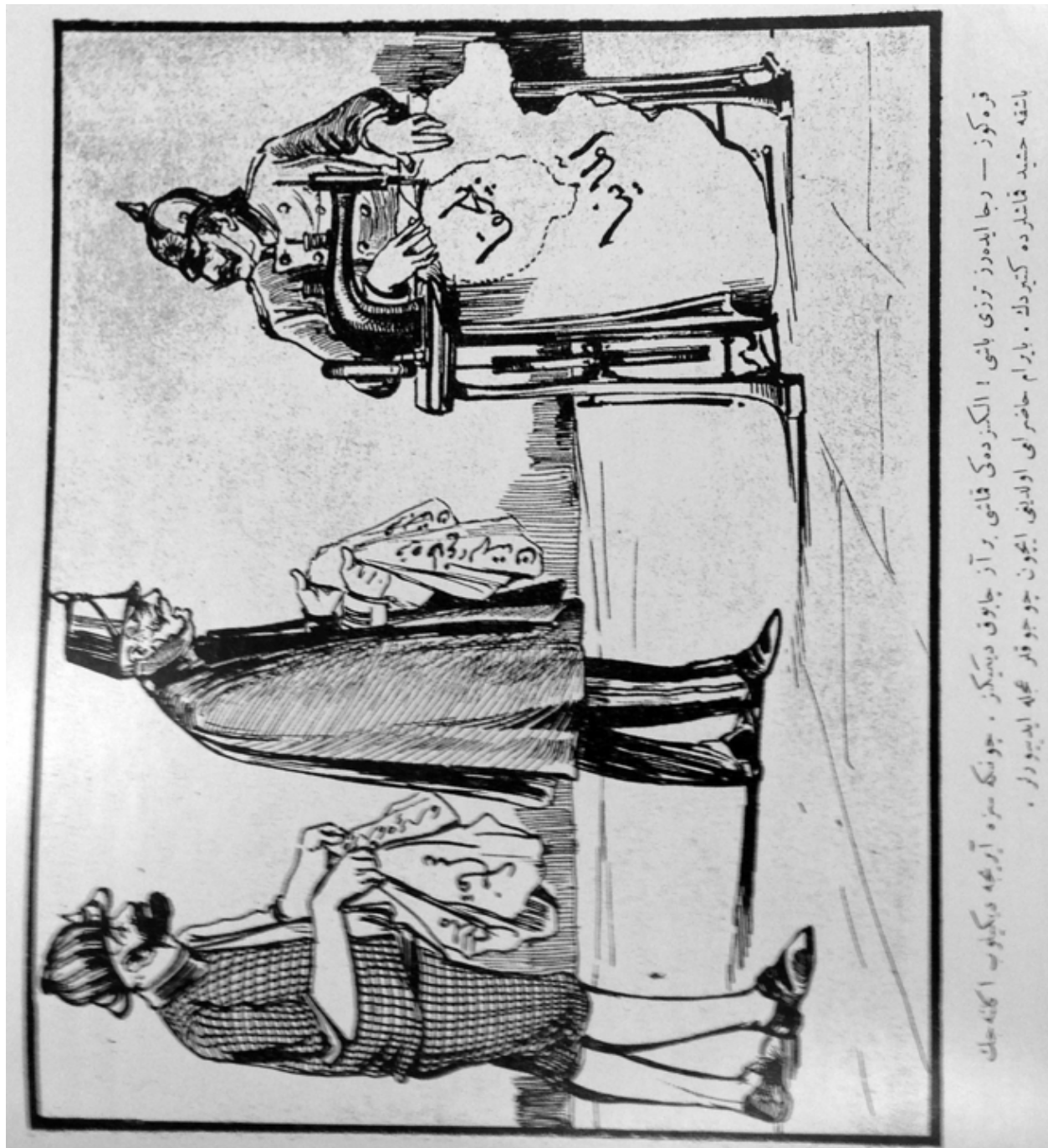


Fig. 1.35. Unknown artist, comic view of Kaiser Wilhelm II depicted as a tailor sewing desired lands together, *Kalem*, September 11, 1914.



Fig. 1.36. Unknown, Indian prisoners of war working on the Baghdad railway, c. 1916. IWM Q 24739.

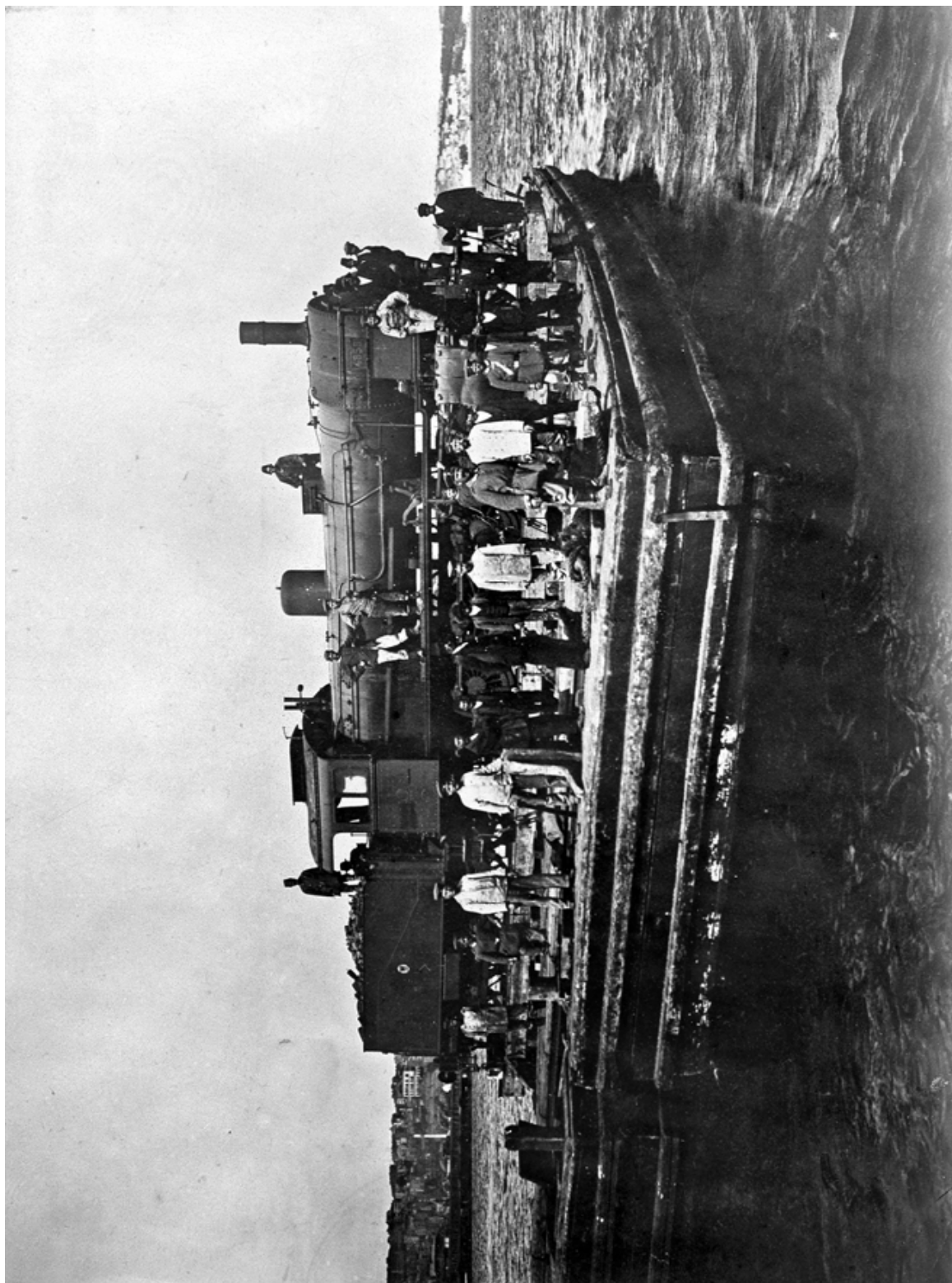


Fig. 2.1. View of a German locomotive being transported across the Bosphorous, 1904. BKA bs-d 2015.

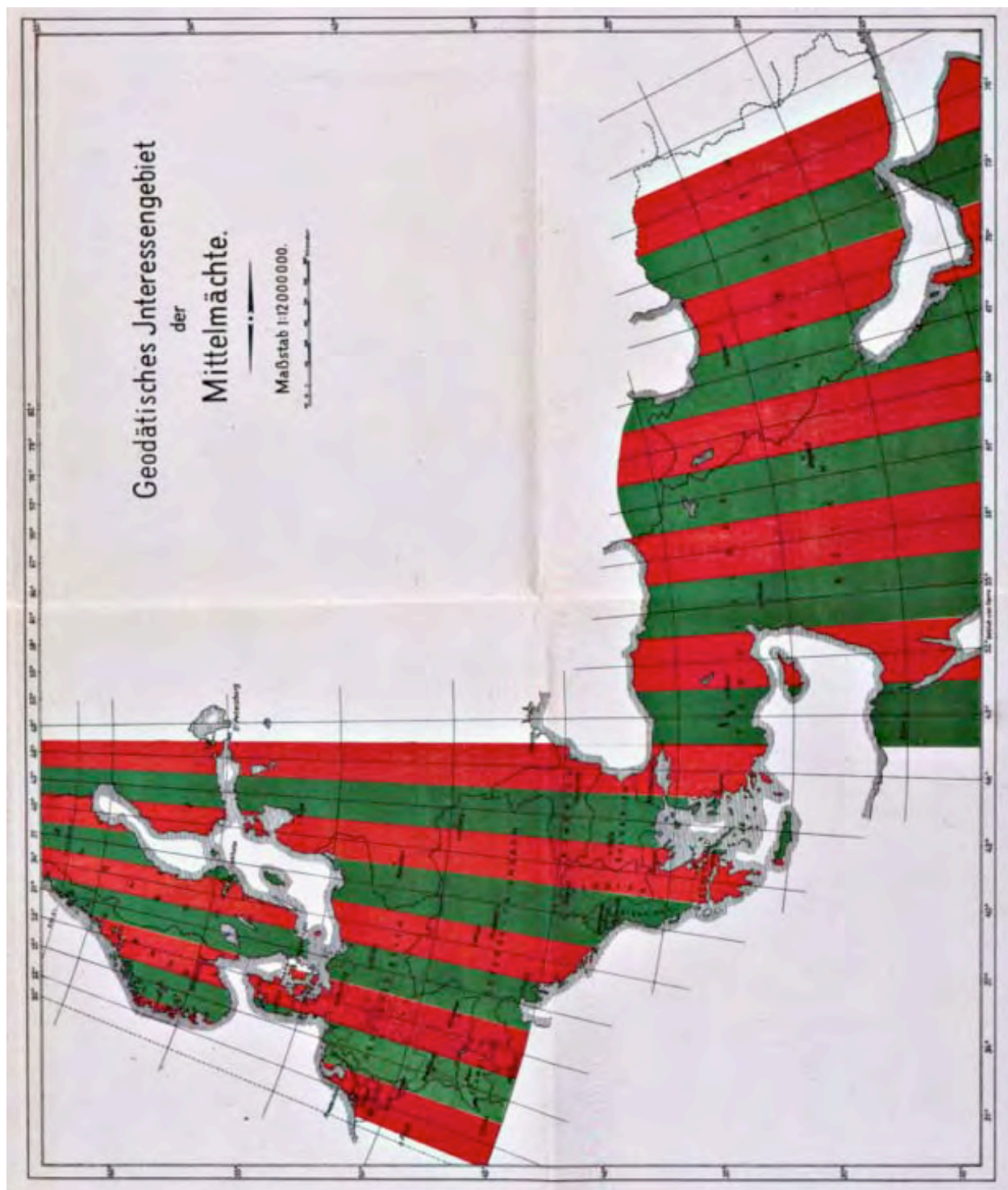


Fig. 2.3. Reichskolonialamt, Map of the geodetic sphere of interests of the Central Powers, c. 1914. Ba R1001/6812 K-1, fiche 1.



Fig. 2.4. “Khanjiyan,” Celebration of the Rumelian Railway at Edirne, 1877. Ink on paper, 35 x 47 cm. Photograph: Invaluable Auctions.

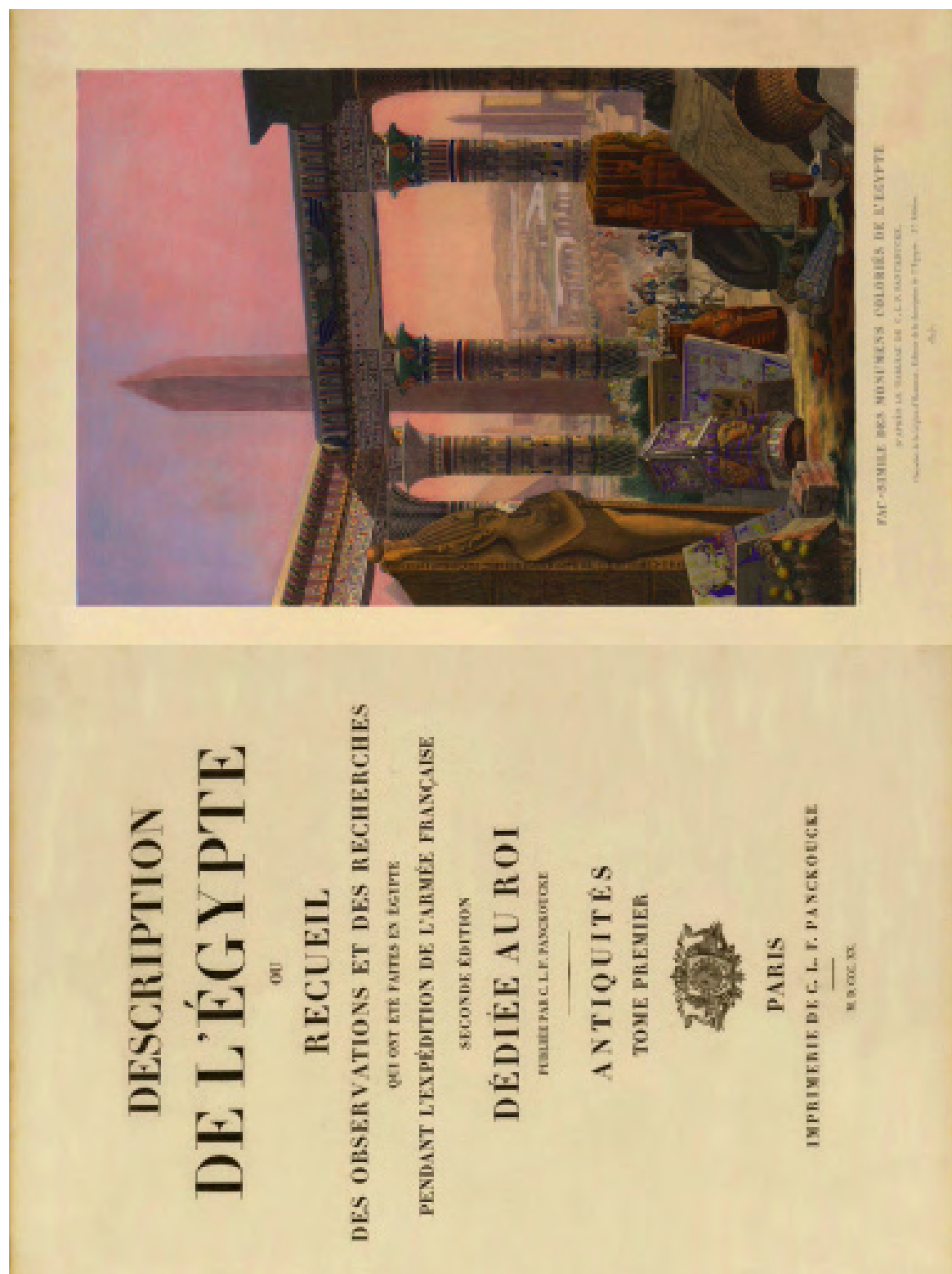


Fig. 2.5. Commission des Sciences et Arts d'Égypte, *Description de l'Égypte*, colophon to tome 1 (Paris, 1809). Biblioteca Alexndrina.

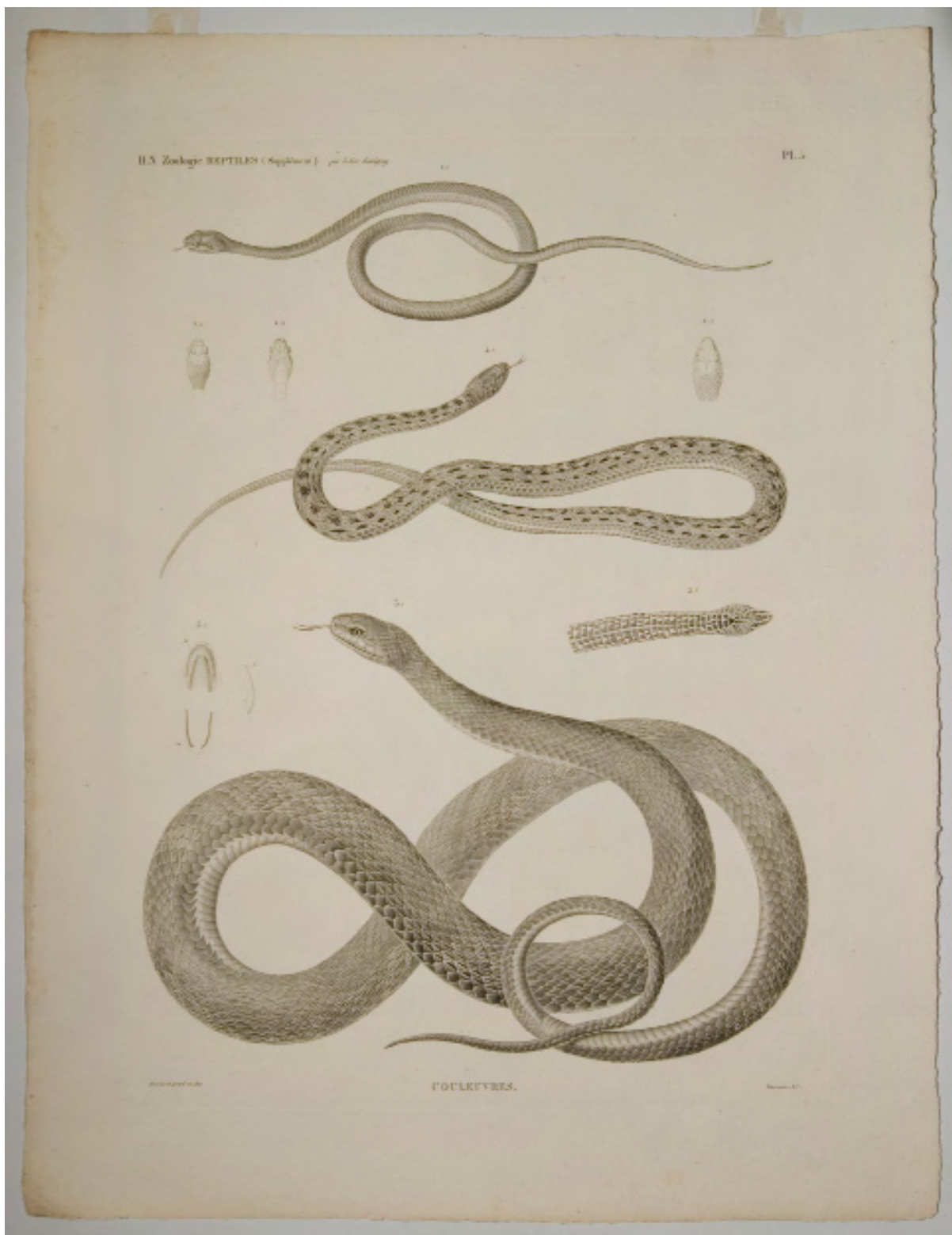


Fig. 2.7. Commission des Sciences et Arts d'Égypte, *Description de l'Égypte*, vol. XXVI (Paris, 1829), plate 5. Biblioteca Alexndrina.

THE
GRAMMAR OF ORNAMENT

BY
OWEN JONES.

ILLUSTRATED BY EXAMPLES
FROM VARIOUS STYLES OF ORNAMENT.

ONE HUNDRED FOLIO PLATES,
DRAWN ON STONE BY
F. BEDFORD,
AND PRINTED IN COLOURS BY
DAY AND SON.



LONDON:
PUBLISHED BY DAY AND SON, LITHOGRAPHERS TO THE QUEEN,
GATE STREET, LINCOLN'S INN FIELDS.
MDCCCLVI.

Fig. 2.8. Owen Jones, *The Grammar of Ornament* (London, 1861), cover. Harvard University Libraries.

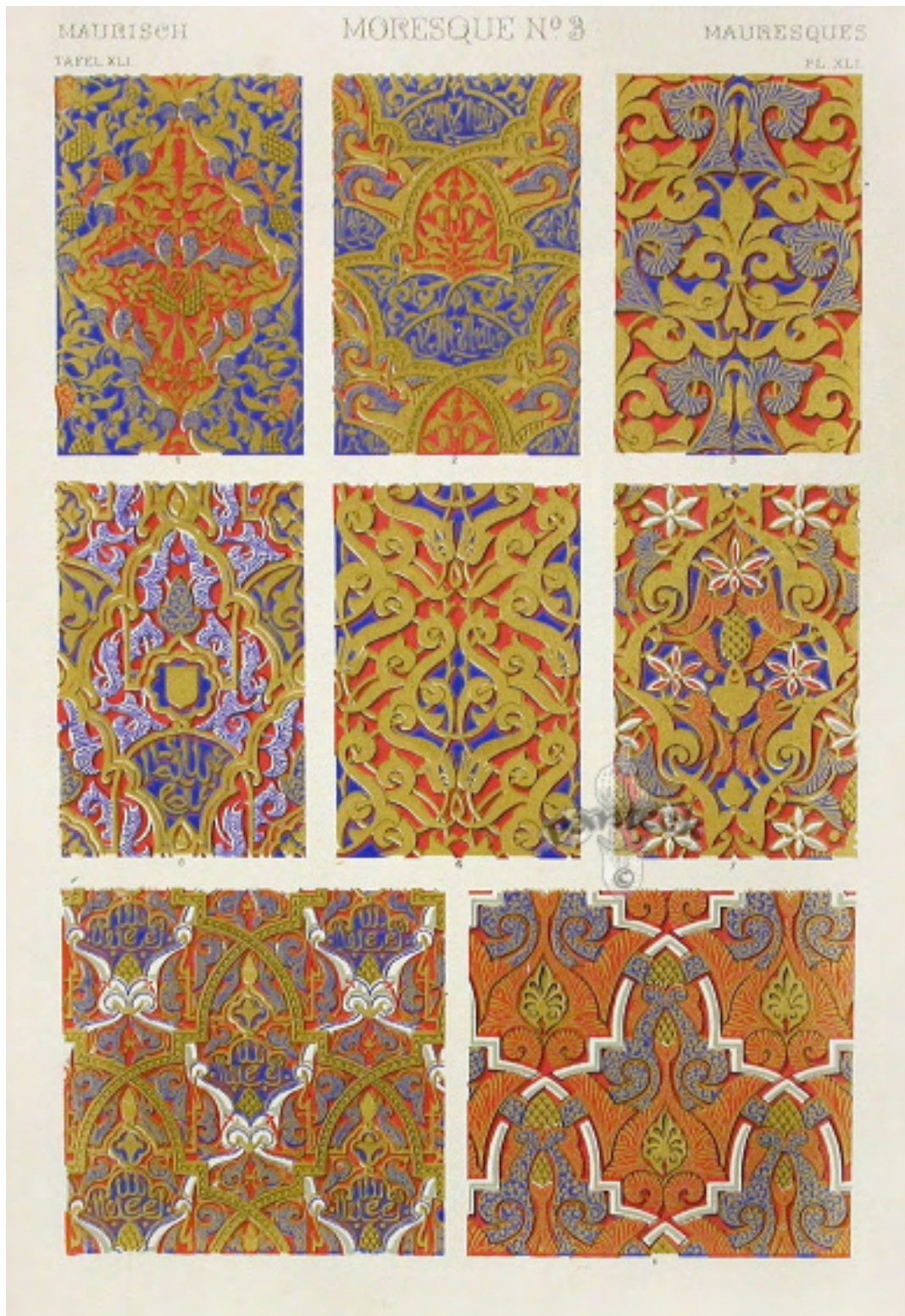
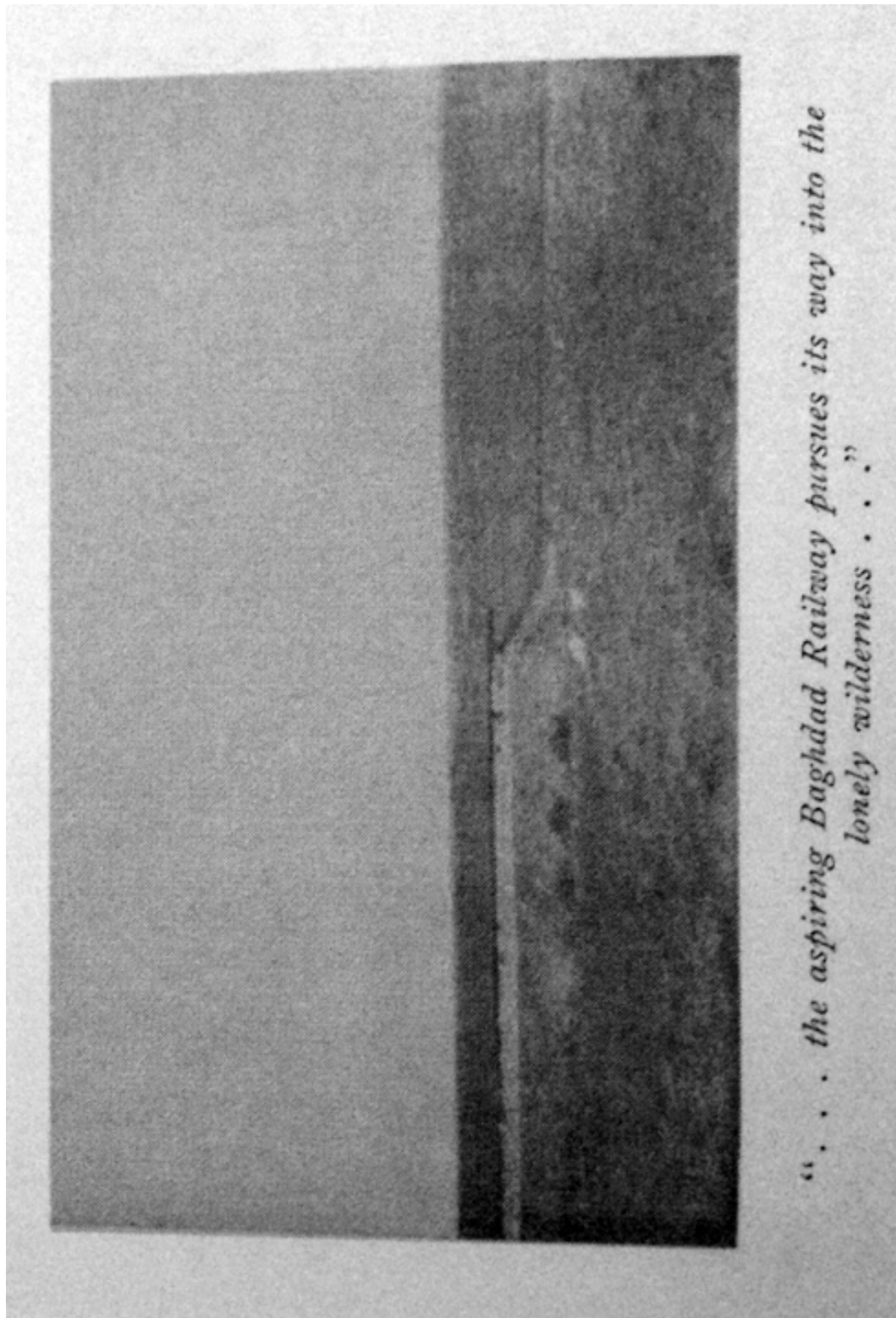


Fig. 2.9. Owen Jones, *The Grammar of Ornament* (London, 1861), plate 41. Harvard University Libraries.



Fig. 2.10. Owen Jones, *The Grammar of Ornament* (London, 1861), Egyptian no. 3, plate 1. Harvard University Libraries.



" . . . the aspiring Baghdad Railway pursues its way into the
lonely wilderness . . . "

Fig. 2.11. David Fraser, view of the end of the Baghdad Railway near Bulgurlu c. 1908, from David Fraser, *The Short Cut to India: The Record of a Journey along the Route of the Baghdad Railway* (Edinburgh; London: W. Blackwood and Sons, 1909), 50.

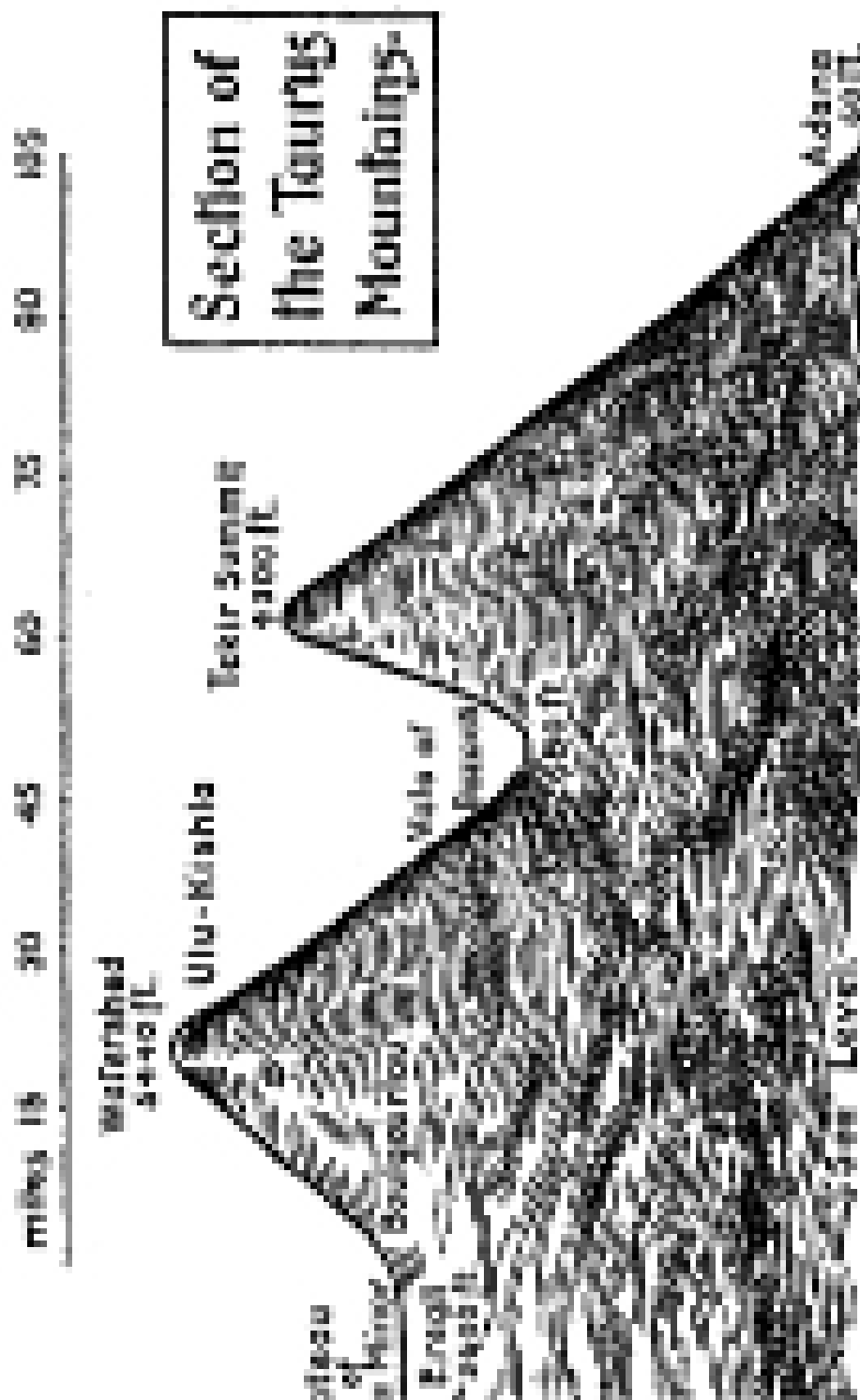


Fig. 2.12. David Fraser, Section of the Taurus Mountains, from David Fraser, *The Short Cut to India: The Record of a Journey along the Route of the Baghdad Railway* (Edinburgh; London: W. Blackwood and Sons, 1909), 56

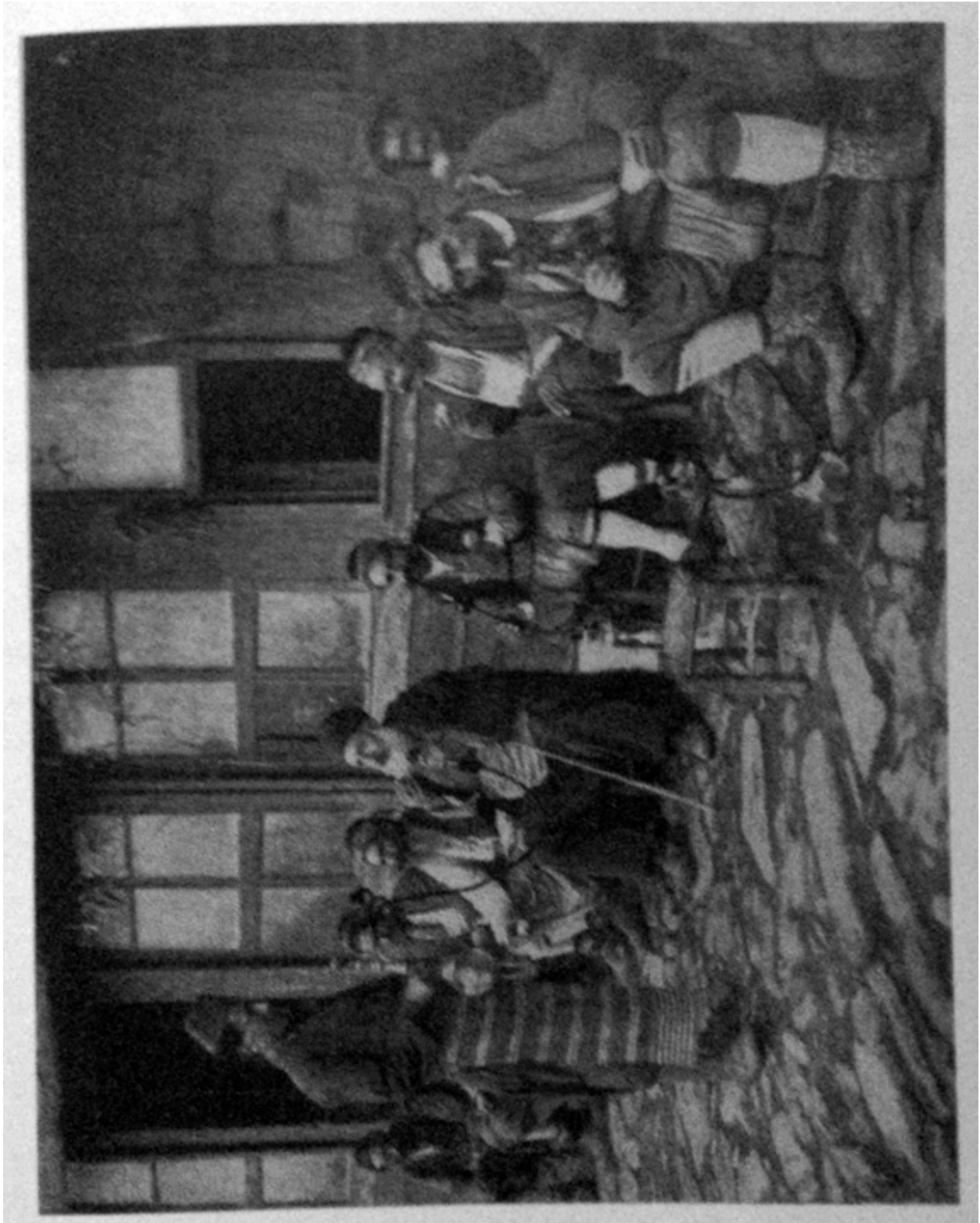


Fig. 2.13. David Fraser, View of men at a coffee shop, from David Fraser, *The Short Cut to India: The Record of a Journey along the Route of the Baghdad Railway* (Edinburgh; London: W. Blackwood and Sons, 1909), 306.



Fig. 2.14. Unknown, depiction of an Ottoman geography classroom, *Servet-i Fünun* 648 (11 Eylül 1319).



Fig. 2.15. Unknown, Ottoman boys demonstrating German Turnen techniques, *Servet-i Fünun*, 723 (17 Şubat 1320).



Fig. 2.16. Study of international bridges, *Servet-i Fünun* 524 (15 Mart 1317).



Fig. 2.17. Depiction of the new railway station at Konya, *Servet-i Fünun* 293 (10 Teşrinievvel 1312).



Fig. 2.18. Unknown, view of the Palace of Kaykubad, *Servet-i Fiınun* 292 (3 Teşrinievvel 1312).



Fig. 2.19. Unknown, view of railway work at Muzerib, *Servet-i Fünun* 553 (3 Teşrinievvel 1317).

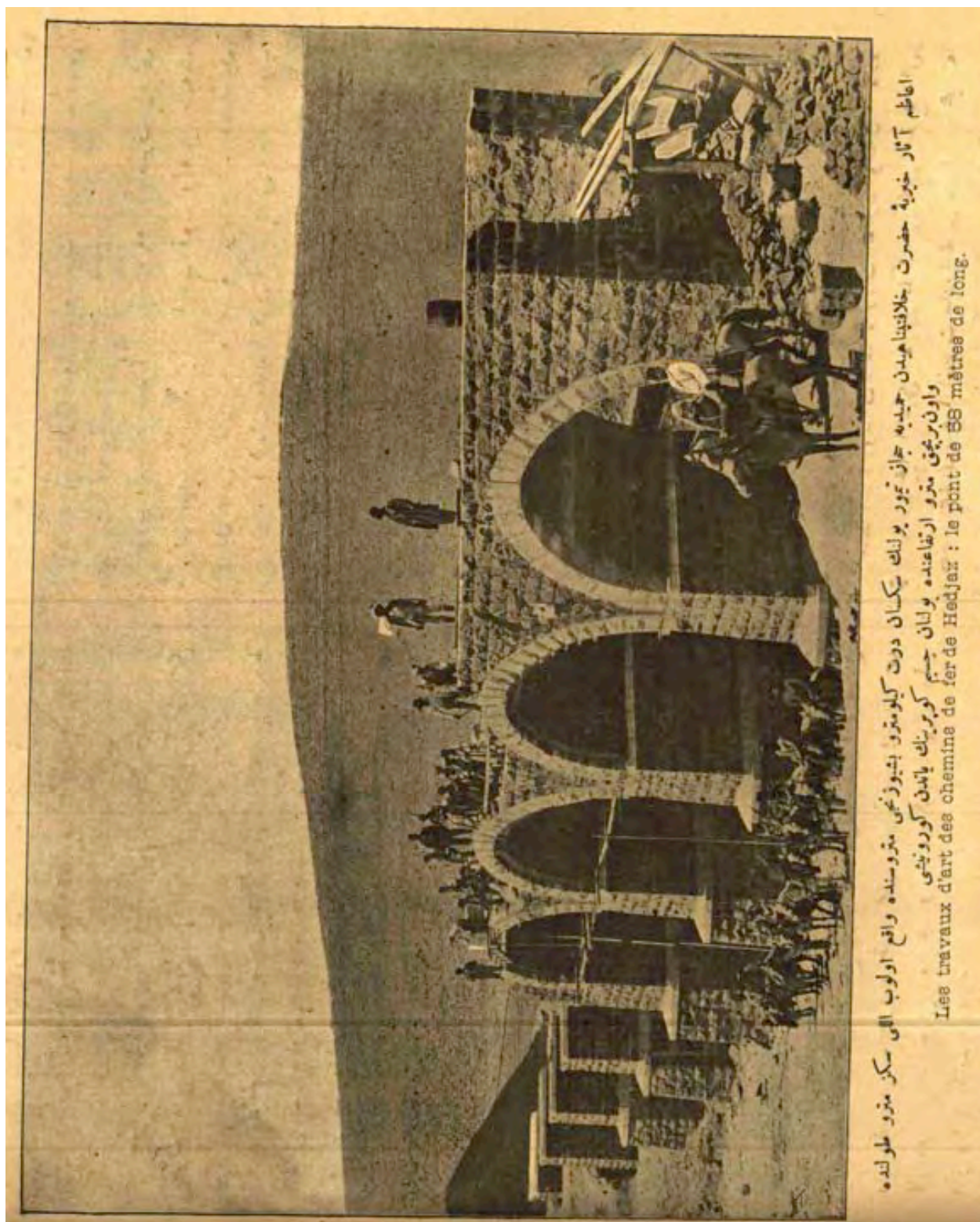


Fig. 2.20. Unknown, view of bridge construction on the Hejaz Railway, *Servet-i Fünun* 590 (1 Ağustos 1318).

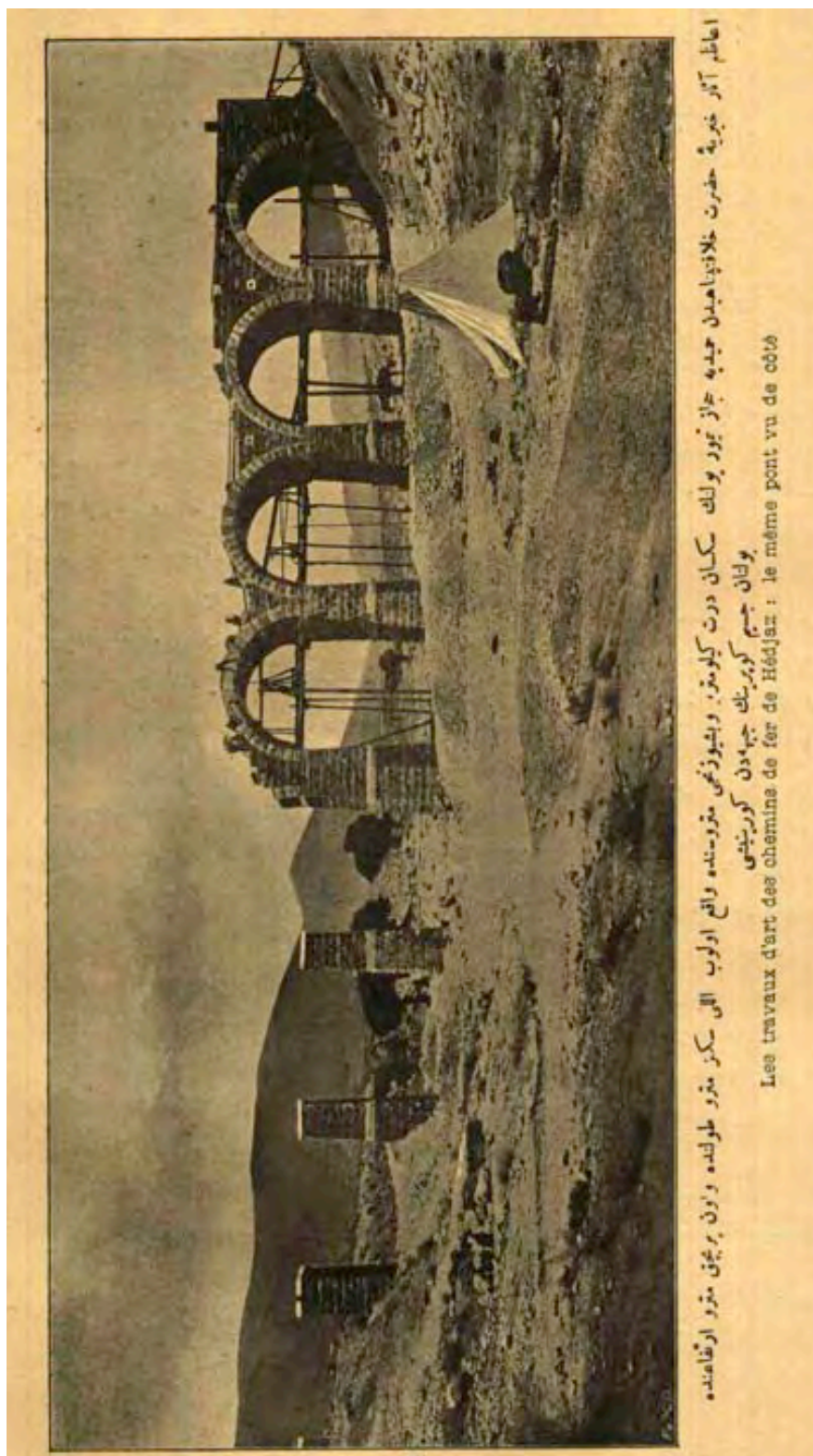


Fig. 2.21. Unknown, view of bridge construction on the Hejaz Railway, *Servet-i Fünun* 590 (1 Ağustos 1318).

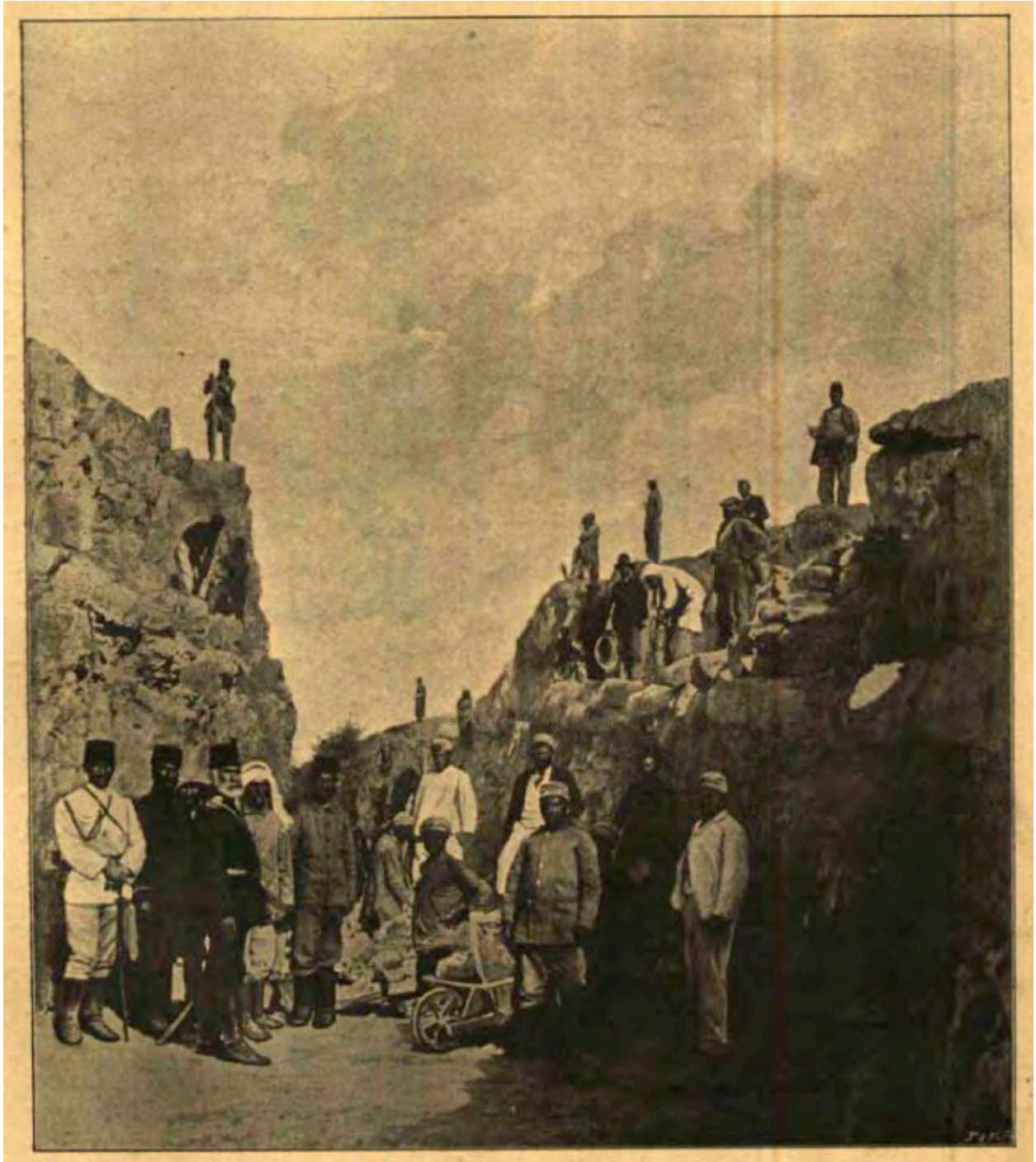


Fig. 2.24. Unknown, view of construction site on the Hejaz Railway, *Servet-i Fünun* 590 (1 Ağustos 1318).



Fig. 2.26. Inauguration view of the Daara-Zerka railway section of the Hejaz Railway, *Servet-i Fünun* 596 (12 Eylül 1318).

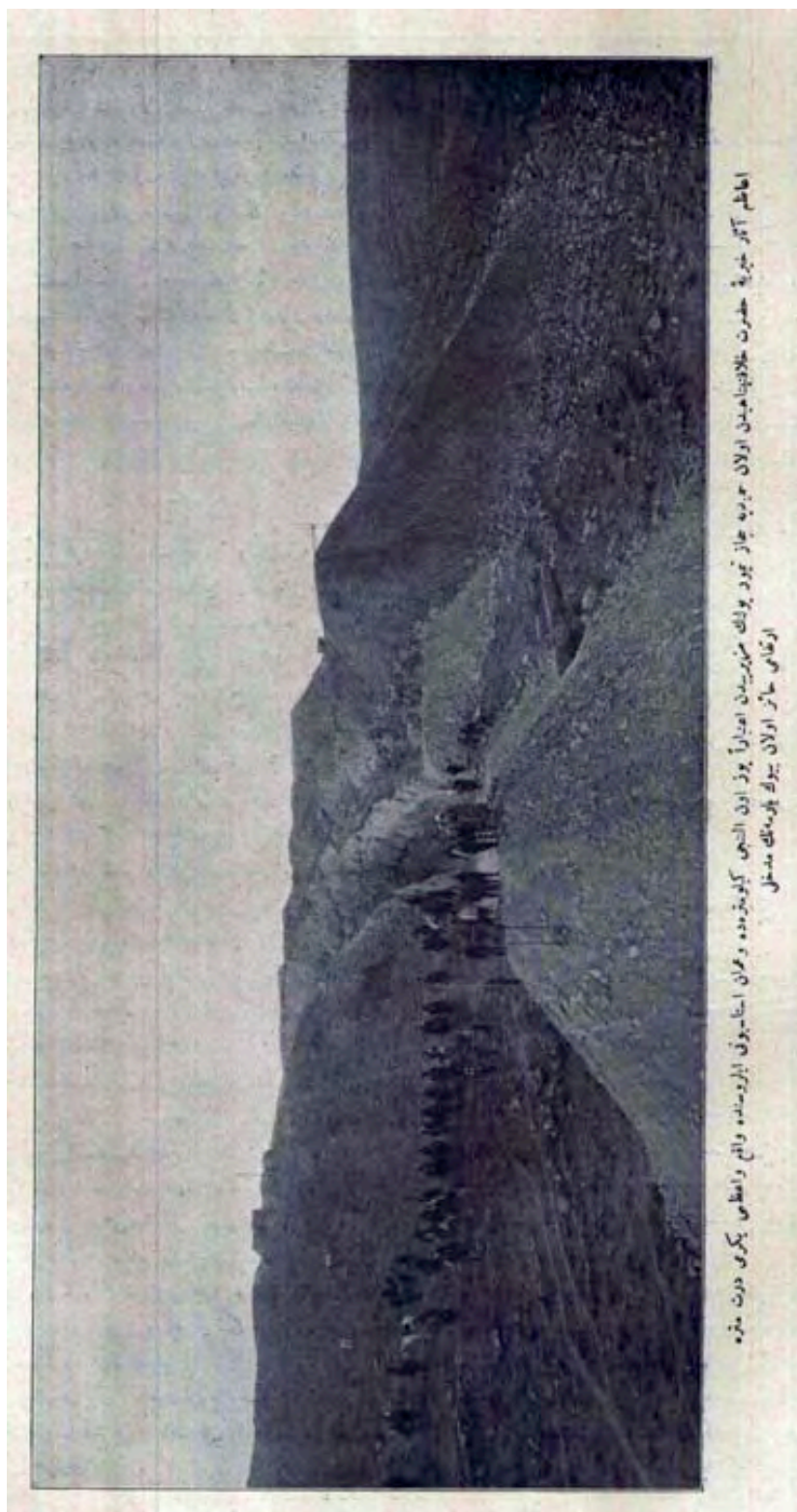


Fig. 2.27. Unknown, view of ballast work on the Hejaz Railway, *Servet-i Fünun* 607 (28 Teşrinisani 1318).



Fig. 2.28. Unknown, view of foundations for Hejaz Railway station facilities, *Servet-i Fünun* 607 (28 Teşrinisani 1318).



Fig. 2.29. Unknown, view of Hejaz Railway station under construction, *Servet-i Fünun* 607 (28 Teşrinisani 1318).

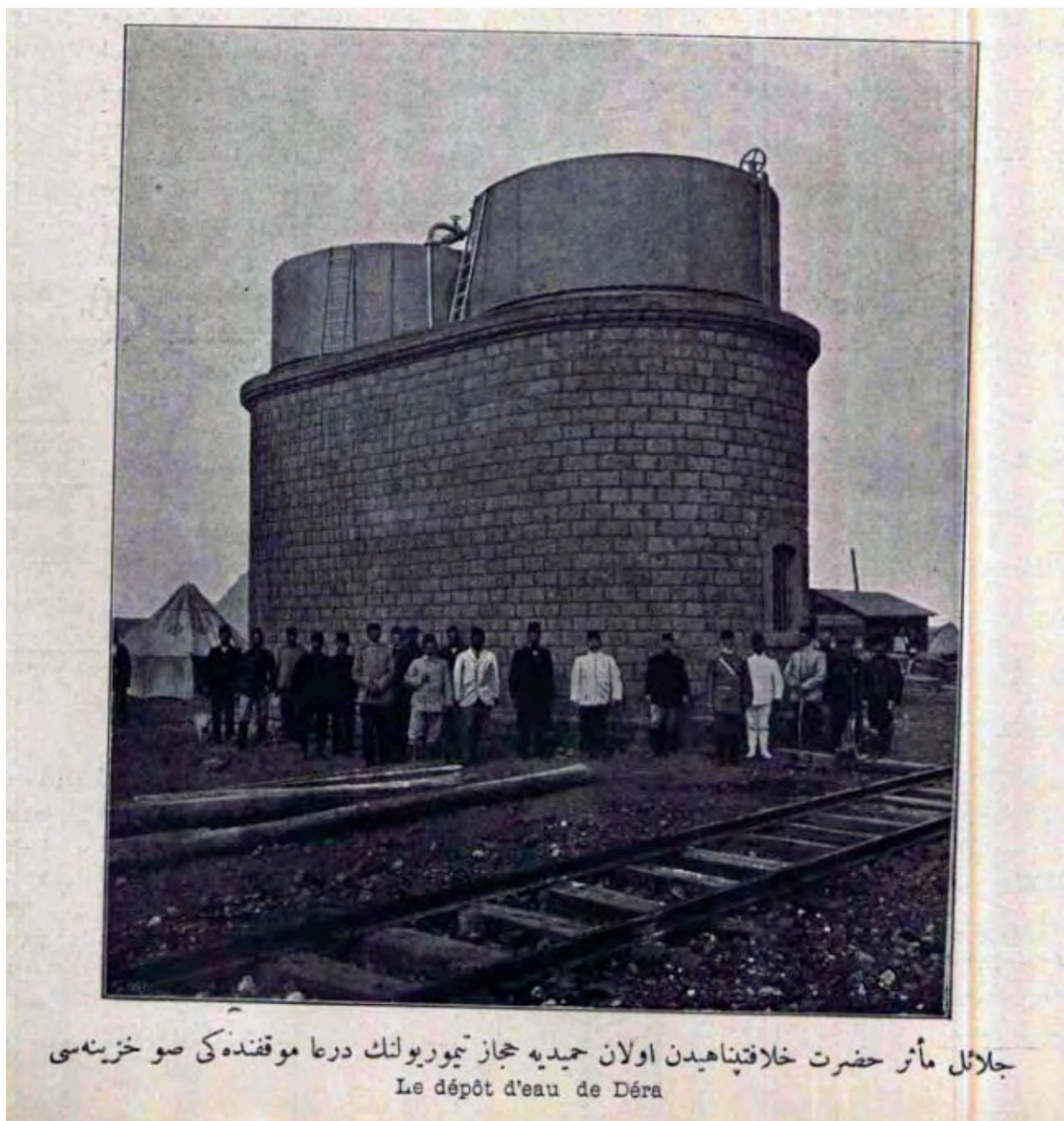


Fig. 2.30. Unknown, view of water tank at Daara station on the Hejaz Railway, *Servet-i Fünun* 645 (21 Ağustos 1319).



احاسن آثار خیرة حضرت خلافتناھیدن اولان حمیدیه حجاز تیمور یولنک ایکی یوز اوتوز اوچنچی کیلومتر وسندہ واقع تونلک مدخلی
Le Tunnel au Kilomètres 233

Fig. 2.31. Unknown, view of Hejaz Railway tunnel, *Servet-i Fünun* 645 (21 Ağustos 1319).



Fig. 2.32. Unknown, view of Hejaz Railway bridge, *Servet-i Fünun* 645 (21 Ağustos 1319).



Fig. 2.33. Unknown, view of ceremonial train on the Hejaz Railway, *Servet-i Fünun* 645 (21 Ağustos 1319).

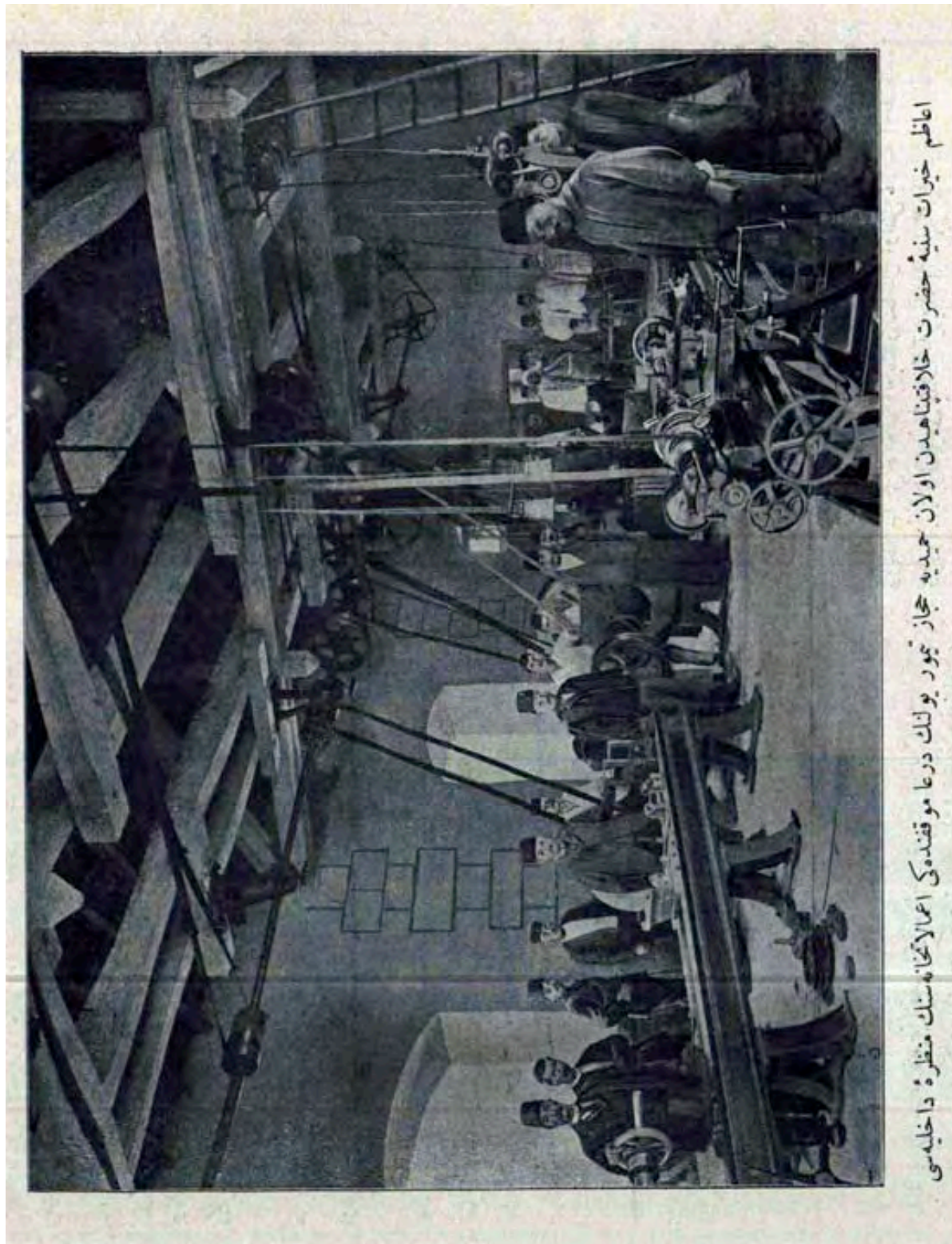
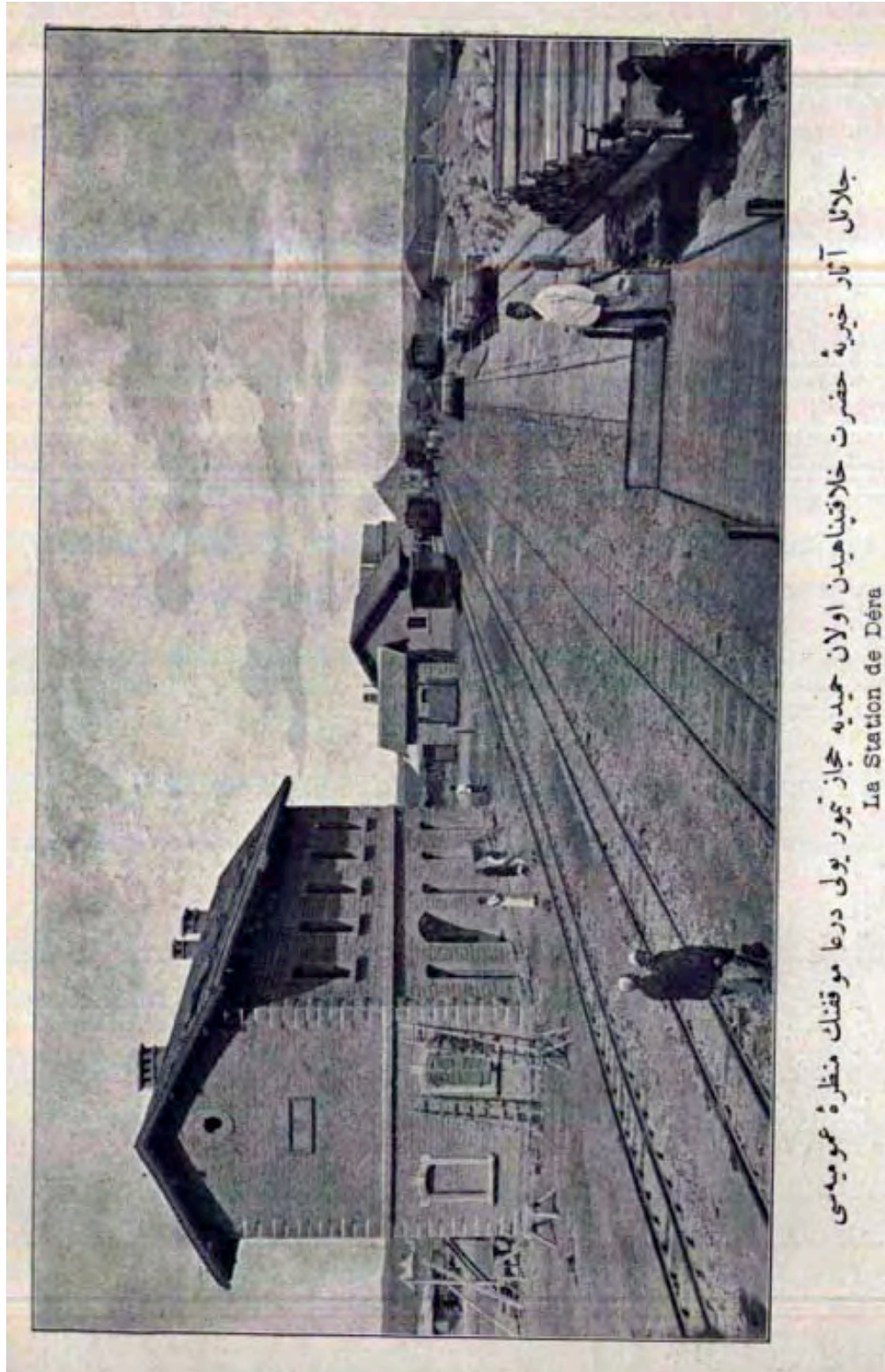


Fig. 2.34. Unknown, view of Hejaz Railway workshop, *Servet-i Fünun* 645 (21 Ağustos 1319).



جلال آثار خیریه حضرت خلائقناہیدن اولان حمیدہ حجاز تیمور پولی درعا موقفتک منظرہ عمومی
La Station de Déra

Fig. 2.35. Unknown, view of Hejaz Railway Station at Daara, *Servet-i Fünun* 645 (21 Ağustos 1319).

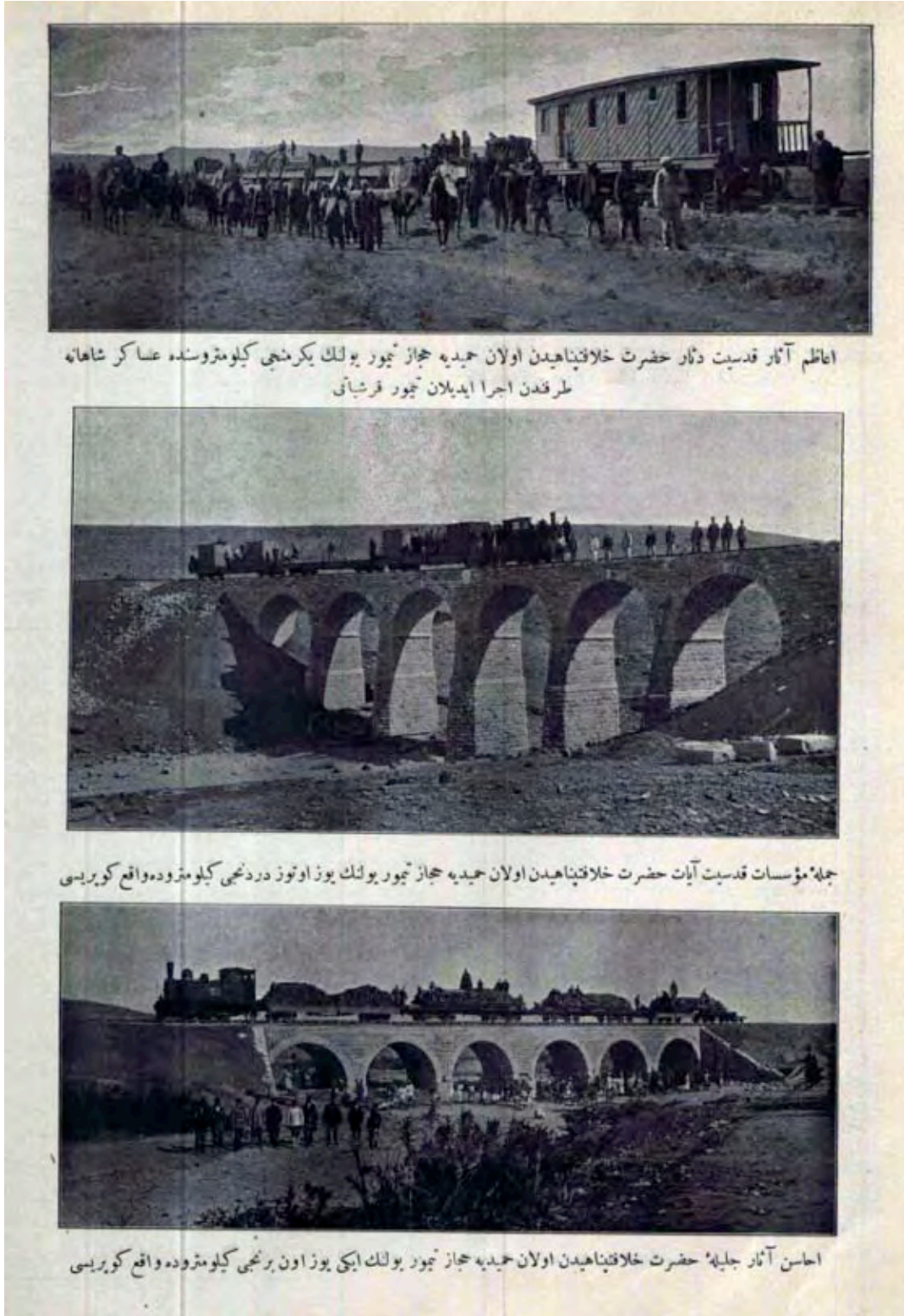
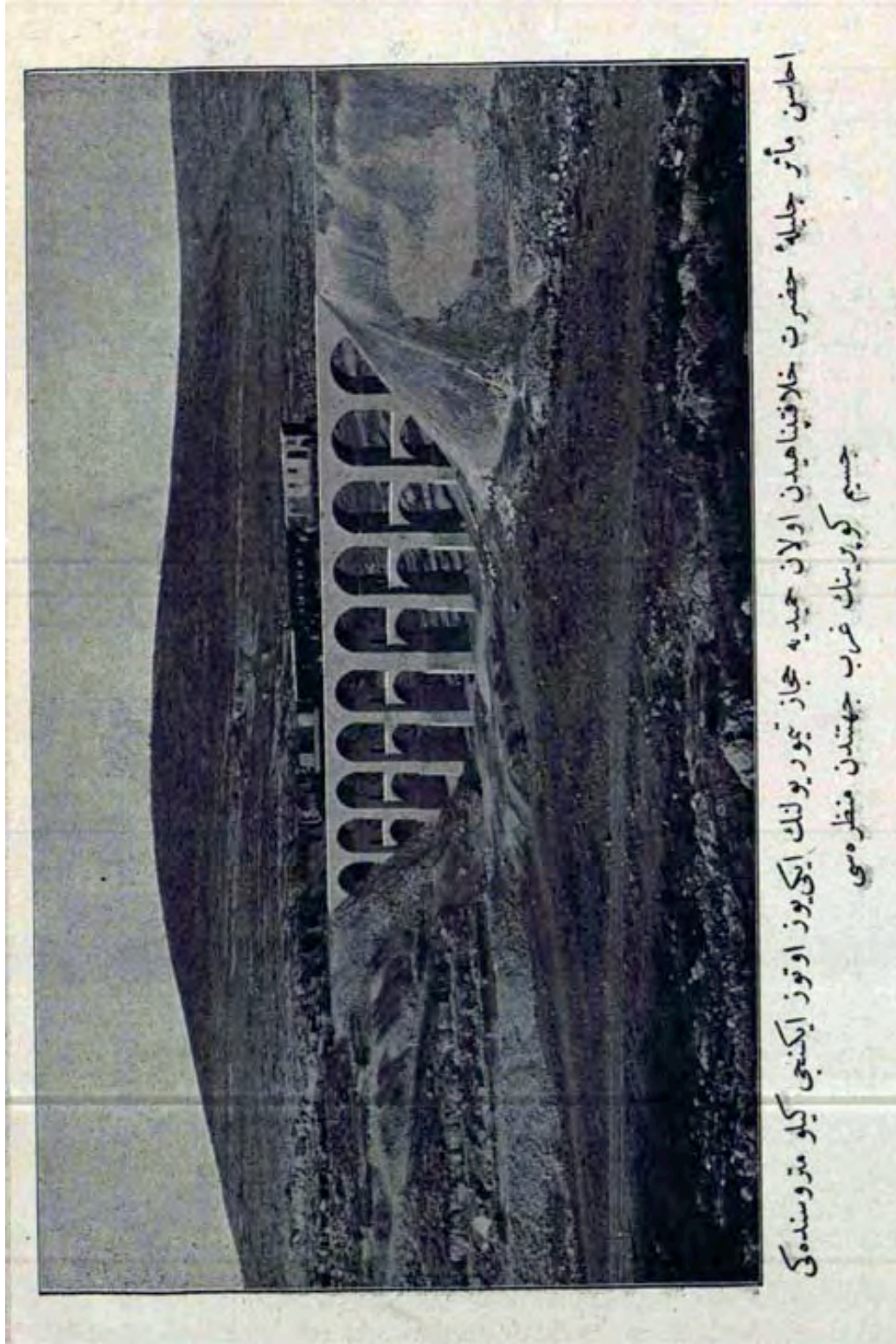


Fig. 2.36. Unknown, views of the Hejaz Railway, *Servet-i Fünun* 648 (11 Eylül 1319).



احاسن ماتر جليله حضرت خلافتناهيدين اولان حمديه حجاز تيور يولنك ايكي يوز اوتوز ايكنجي كيلو متروسندeki
جسيم كوبرينك غرب جهتدن منظره سي

Fig. 2.37. Unknown, view of Hejaz Railway bridge near Amman, *Servet-i Fünun* 648 (11 Eylül 1319).



اعظم آثار قدسیت دثار حضرت خلافتناھیدن اولان حیدیه حجاز تیور یولنک درعا موقوفده ماکنه صوندرمه سیله اعمالخانہ ابنہ سی



بدایع آثار معالی شعار حضرت خلافتناھیدن اولان حیدیه حجاز تیور یولنک اوجیوز قرق پدنجی کیلومتر وشدہ کی
بارمده عساکر شاهانہ لک اشتغالانی



اعظم آثار خیزیہ حضرت خلافتناھیدن اولان حیدیه حجاز تیور یولنک ایک یوز یکرمی دردنجی کیلومتر وده واقع
کوبرینک زمان انشا آتندہ کی منظره سی

Fig. 2.38. Unknown, views of Hejaz Railway construction, *Servet-i Fünun* 648 (11 Eylül 1319).

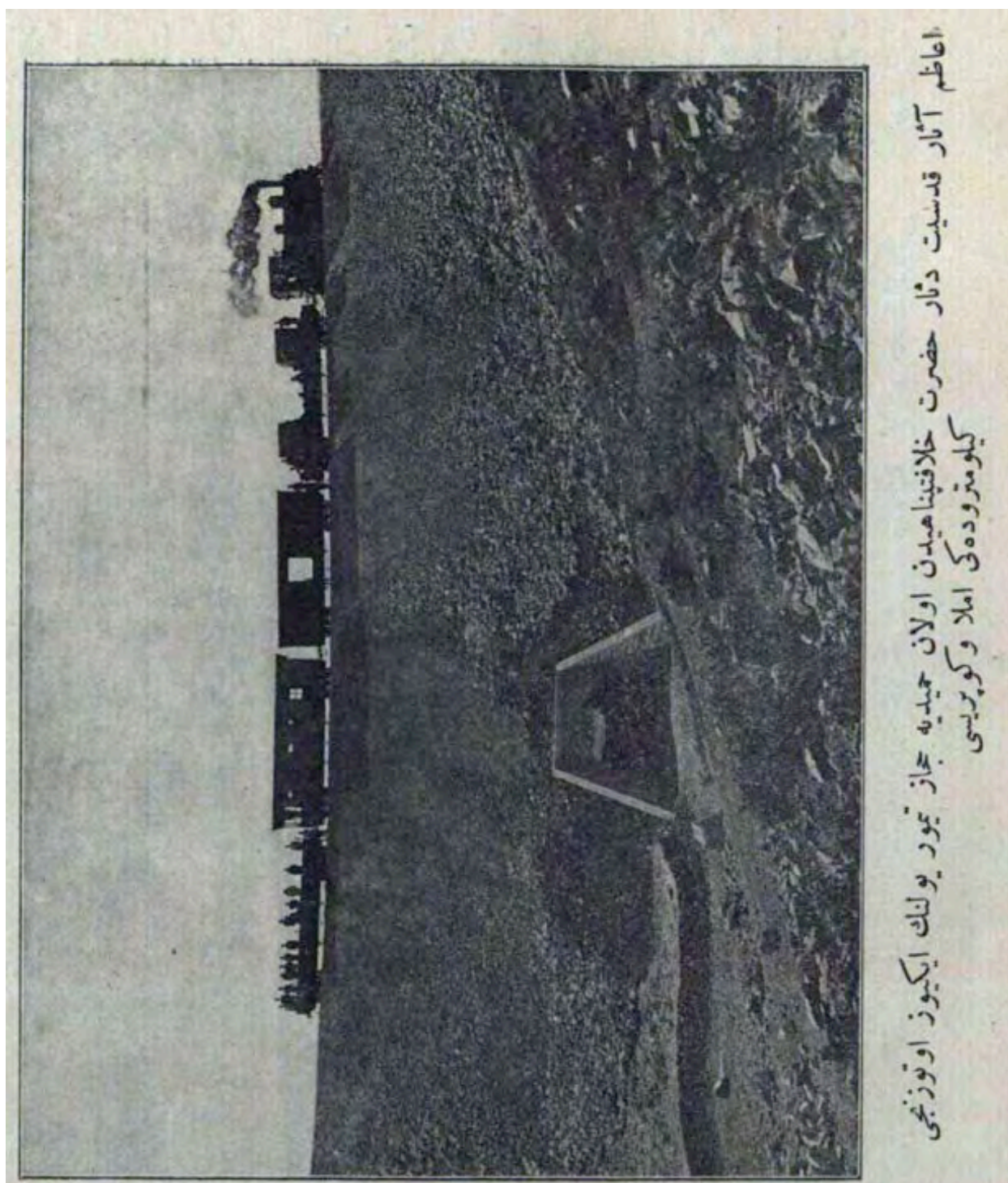


Fig. 2.39. Unknown, view of Hejaz Railway culvert and embankment, *Servet-i Fünun* 651 (2 Teşrinievvel 1319).



Fig. 2.40. Unknown, view of Hejaz Railway workers, *Servet-i Fünun* 651 (2 Teşrinievvel 1319).

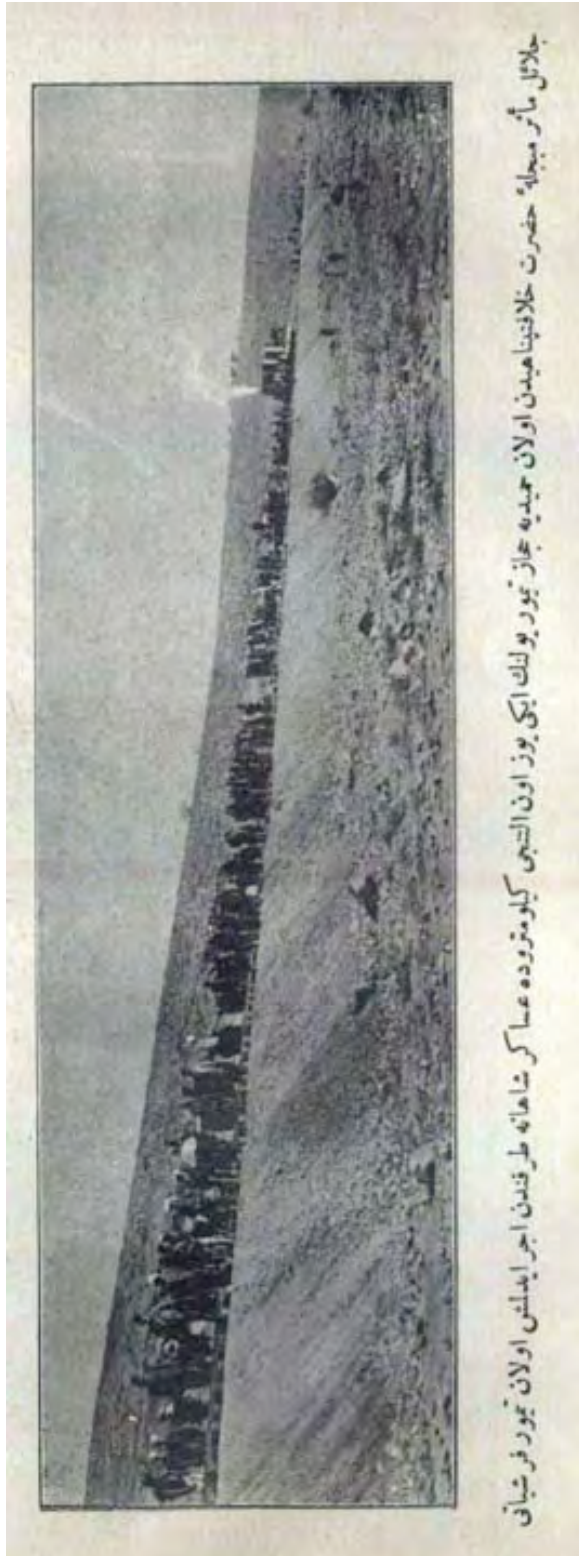


Fig. 2.41. Unknown, view of Hejaz Railway workers, *Servet-i Fünun* 651 (11 Eylül 1319).

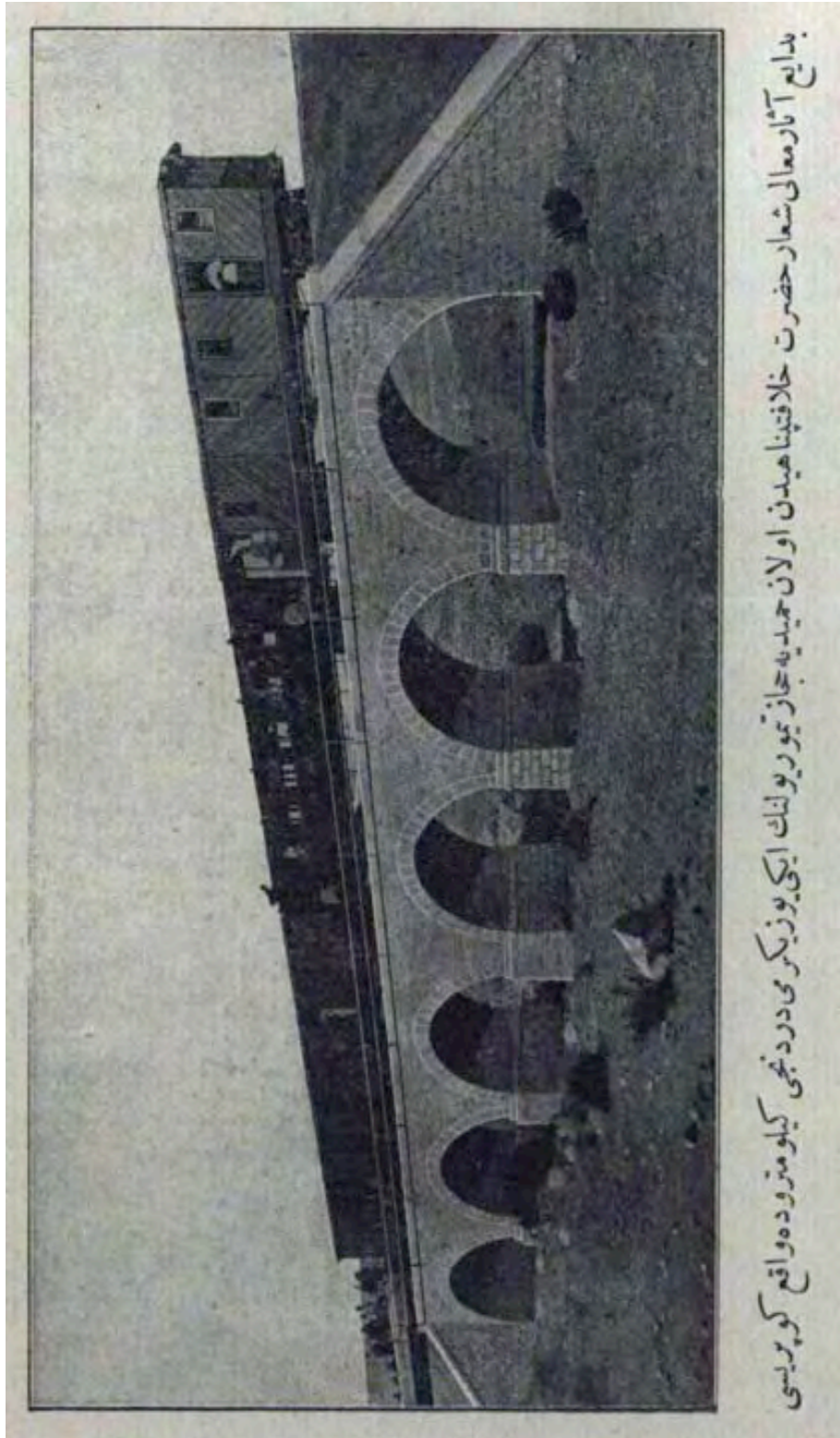


Fig. 2.42. Unknown, view of Hejaz Railway bridge, *Servet-i Fünun* 651 (11 Eylül 1319).



Fig. 2.43. Unknown, view of Hejaz Railway worker camp, *Servet-i Fünun* 654 (23 Teşrinievvel 1319).

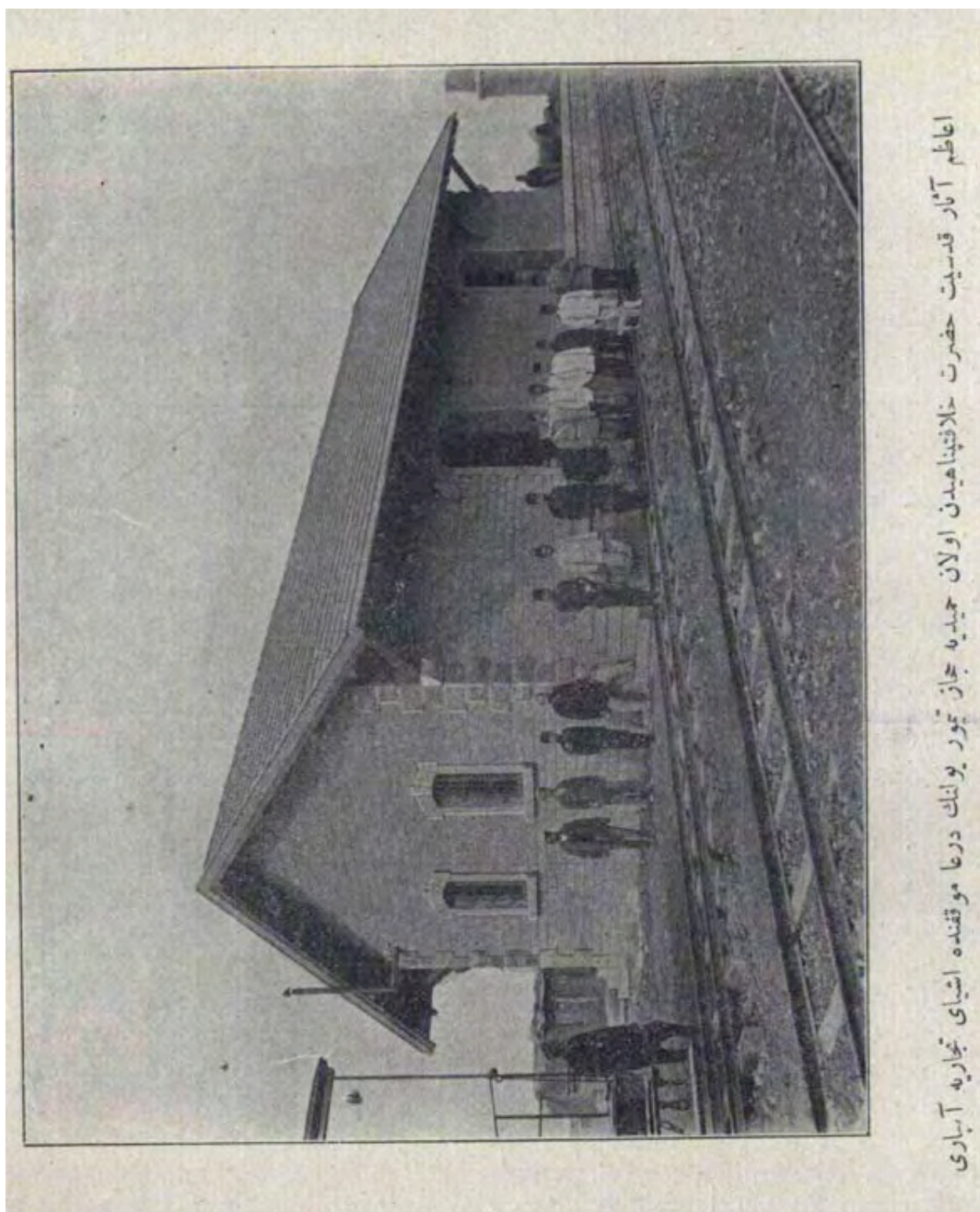


Fig. 2.44. Unknown, view of Hejaz Railway station, *Servet-i Fünun* 654 (23 Teşrinievvel 1319).

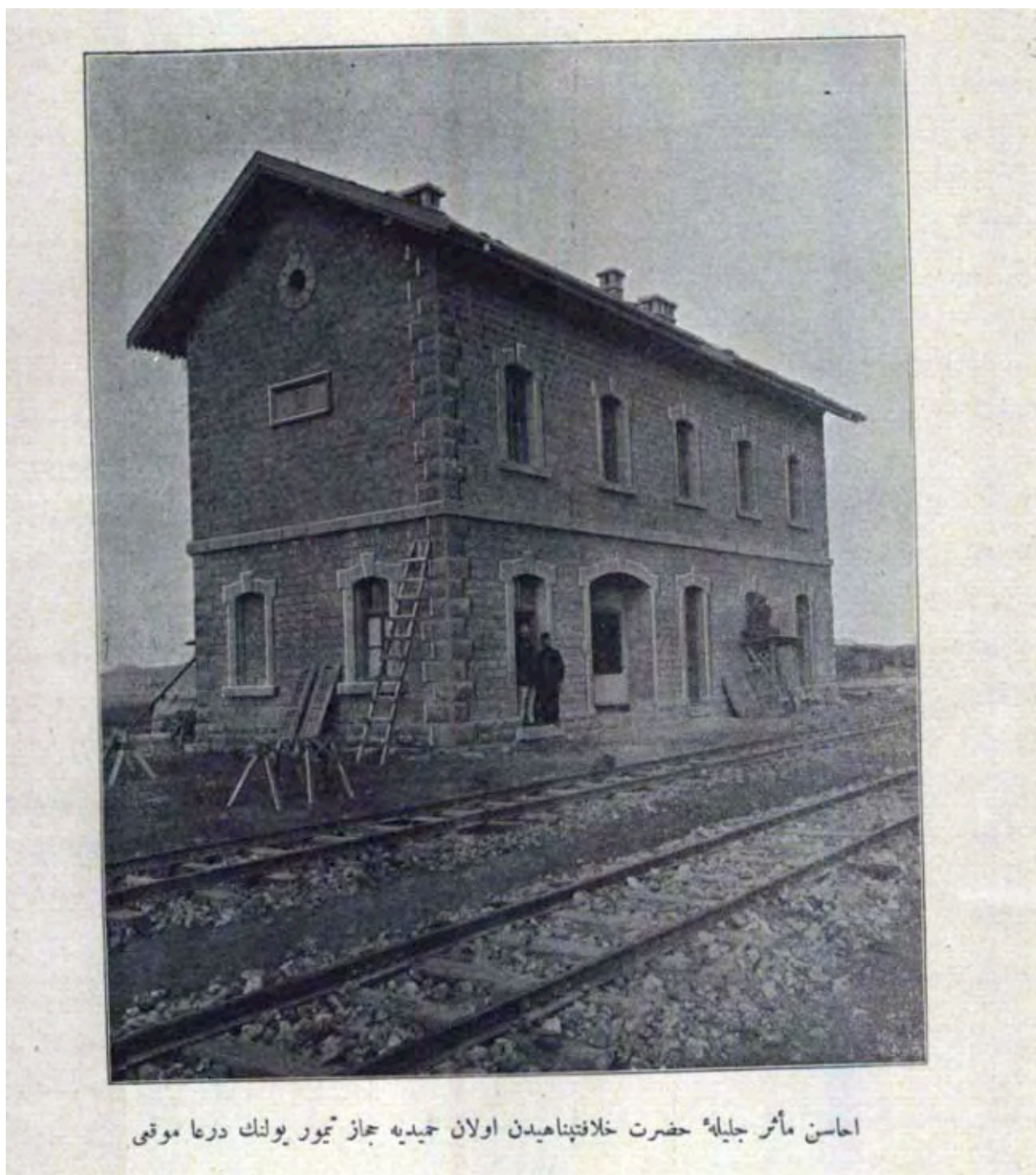


Fig. 2.45. Unknown, view of an upper Hejaz Railway station, *Servet-i Fünun* 654 (23 Teşrinievvel 1319).

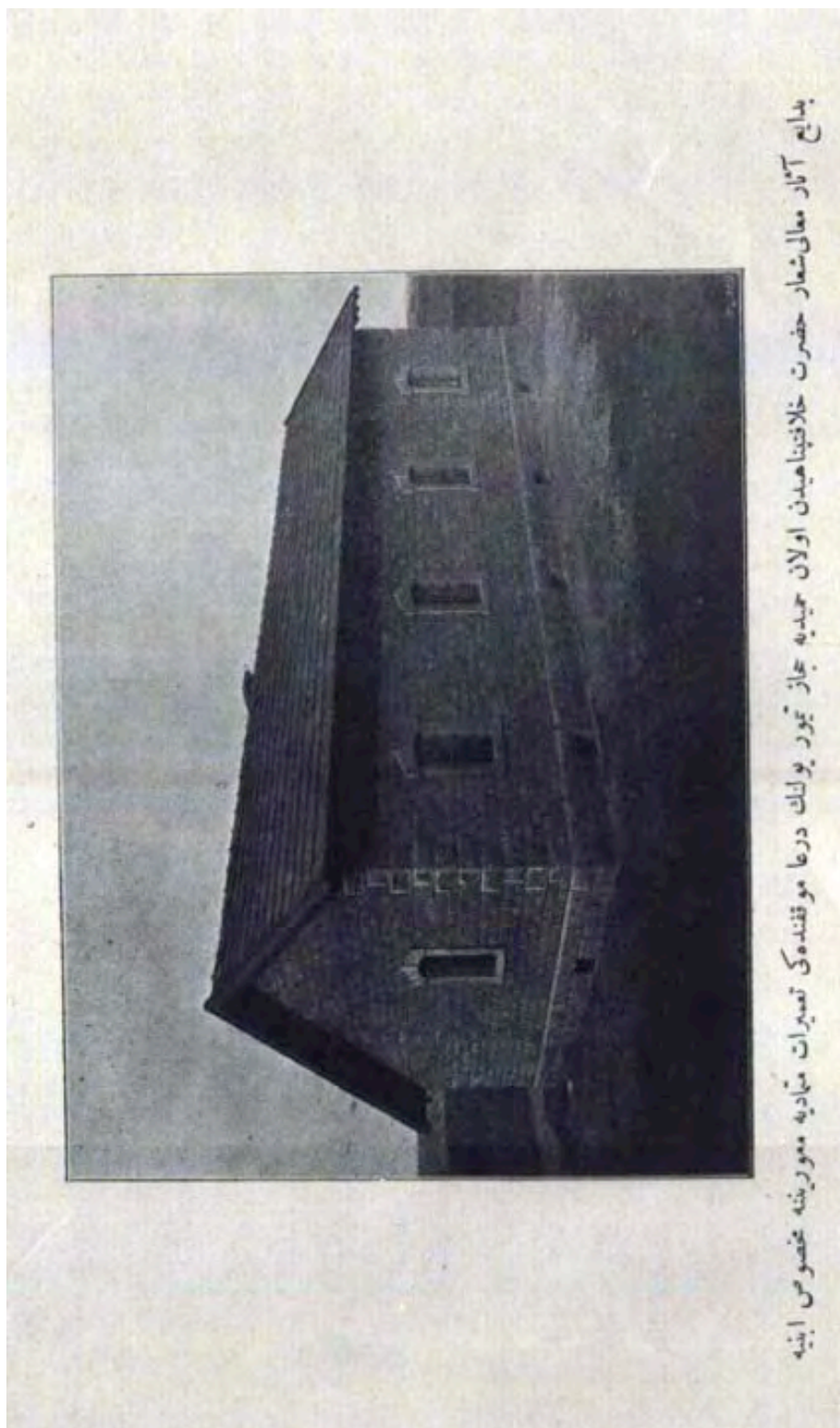


Fig. 2.46. Unknown, view of Hejaz Railway auxiliary station building, *Servet-i Fünun* 654 (23 Teşrinievvel 1319).

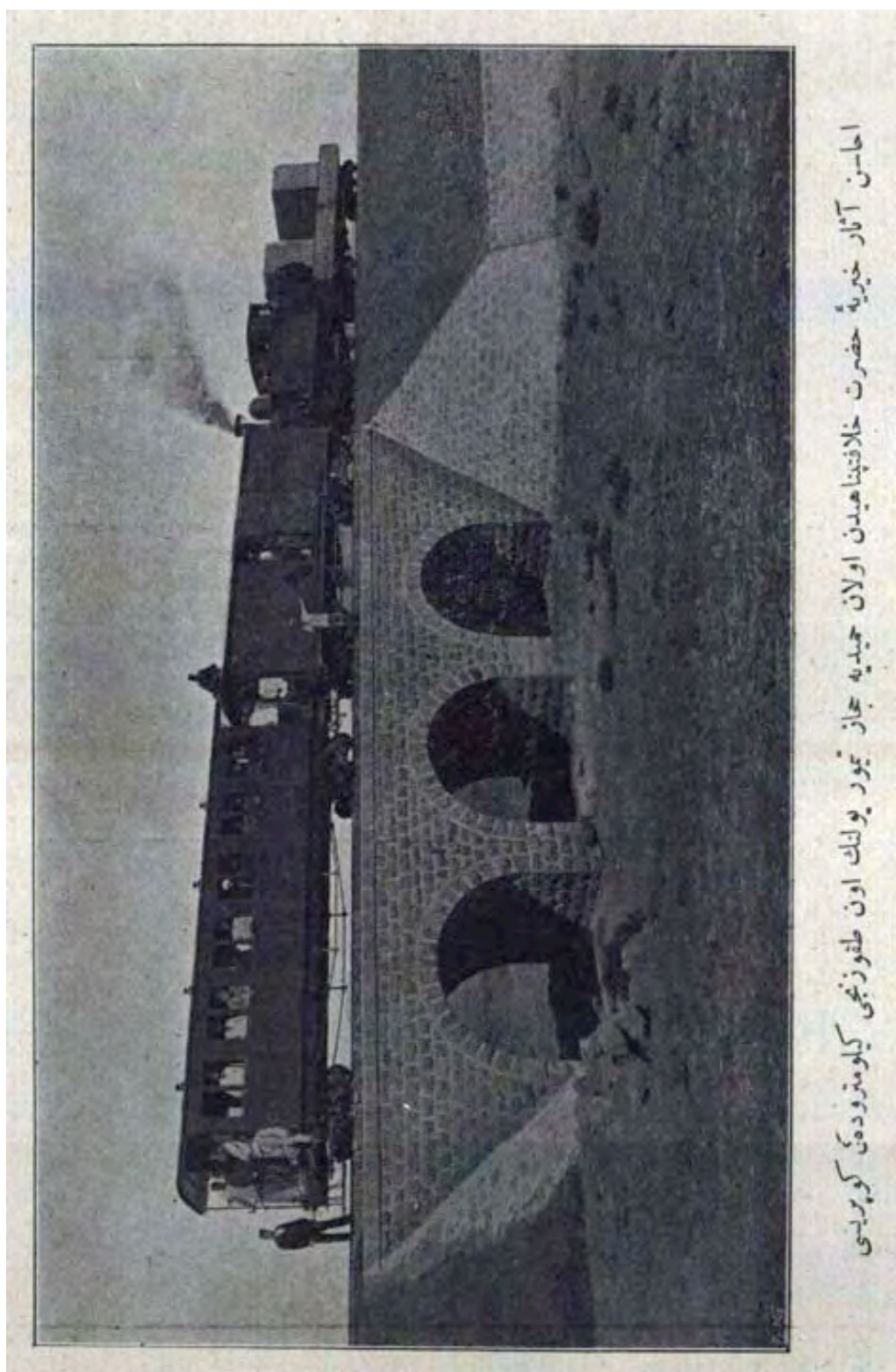
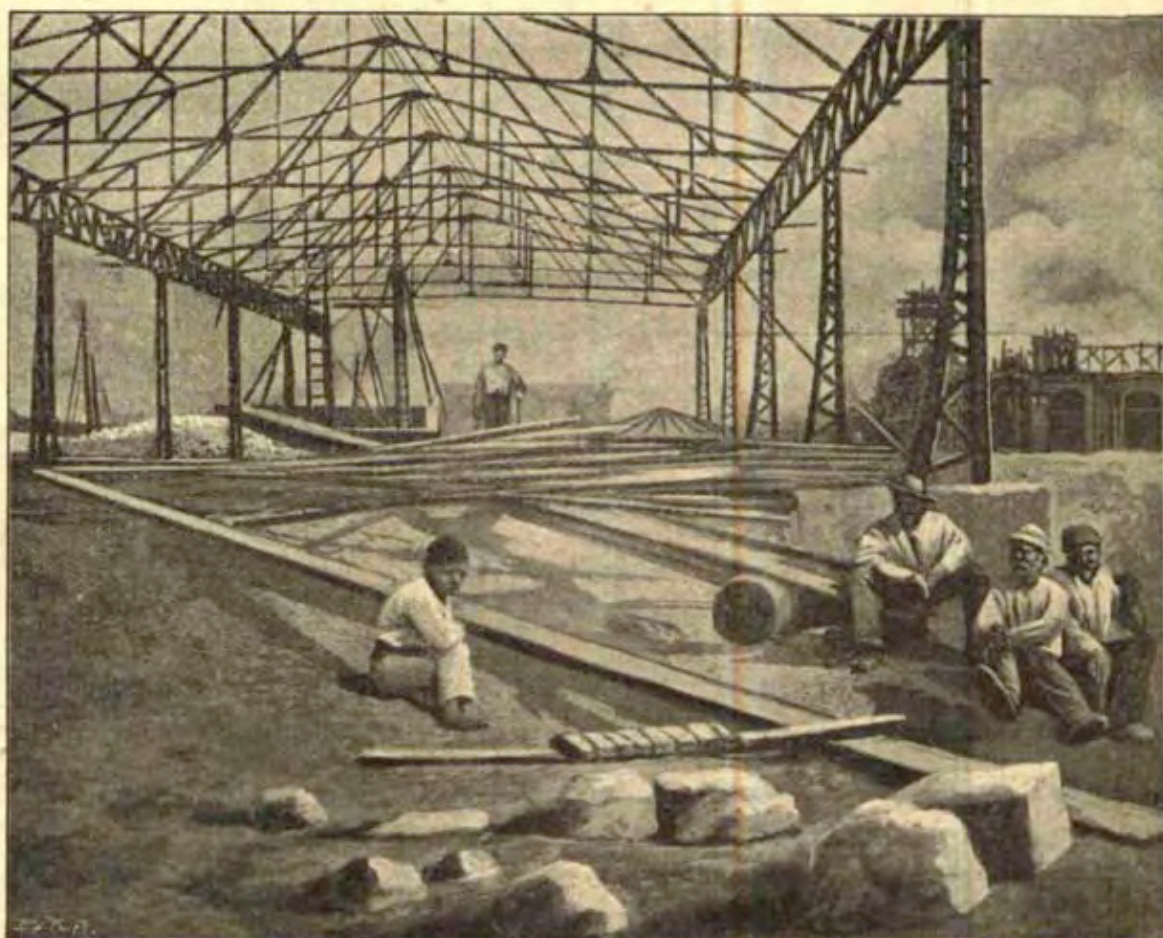


Fig. 2.47. Unknown, view of a Hejaz Railway bridge, *Servet-i Fünun* 654 (23 Teşrinievvel 1319).



Fig. 2.48. Unknown, view of onauguration ceremony along the Hejaz Railway, *Servet-i Fünun* 592-593 (19 Ağustos 1318).



[خصوصی صورتده چ قاردينمیز فوطوغرافیلردن حك اولمشدر] D'après une photographie du Servetifinun
 سایه عمرانوایه حضرت پادشاه اعظمیده اکالی قوه قریبه به کیش اولان حیدرپاشا ریختی عملیاتی منظره لرندن:
 یوز مترو طول و اونوز مترو عرضنده اوله رق انشا ایدیلن آتبارلردن بر عددینک صورت انشاسی
LES TRAVAUX DES QUAIS DE HAIDAR-PACHA
 Un des hongares en fer, au commencement de son montage, longueur 100 mètres sur 30
 de largeur

Fig. 2.49. Unknown, view of the quay facilities at Haydarpaşa under construction, *Servet-i Fünun* 591 (8 Ağustos 1318).

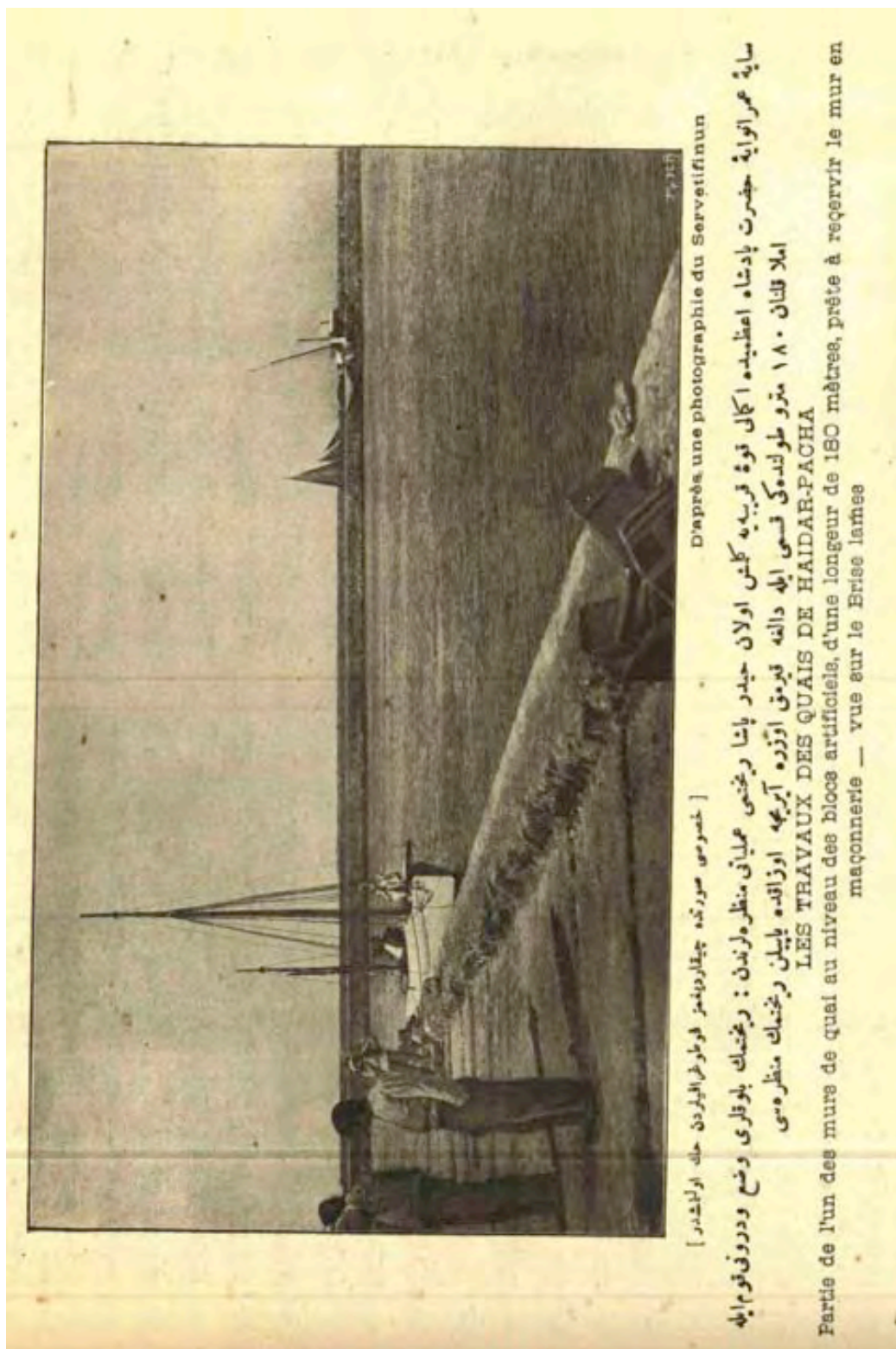


Fig. 2.50. Unknown, view of the Haydarpaşa breakwater, *Servet-i Fünun* 591 (8 Ağustos 1318).

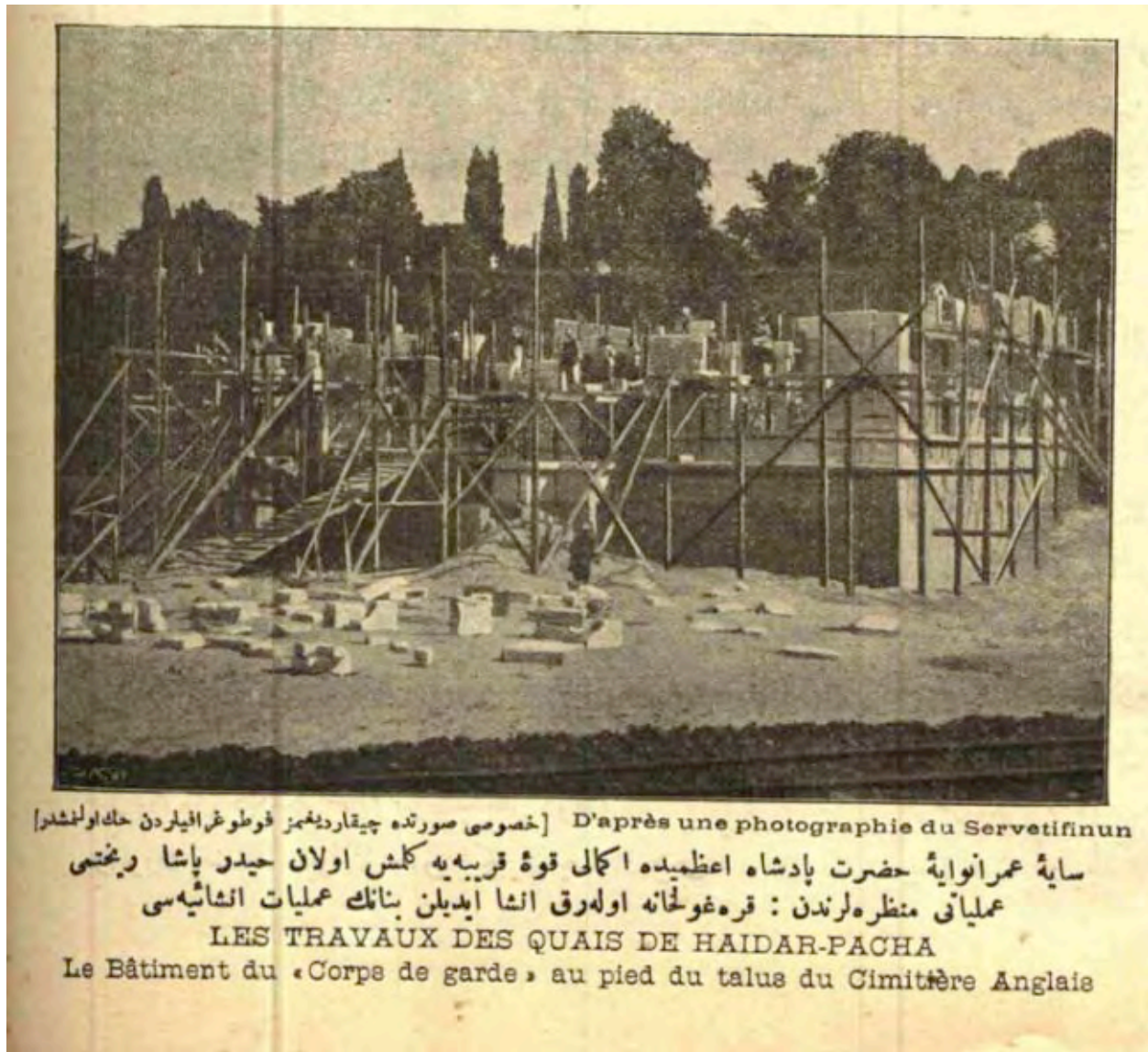
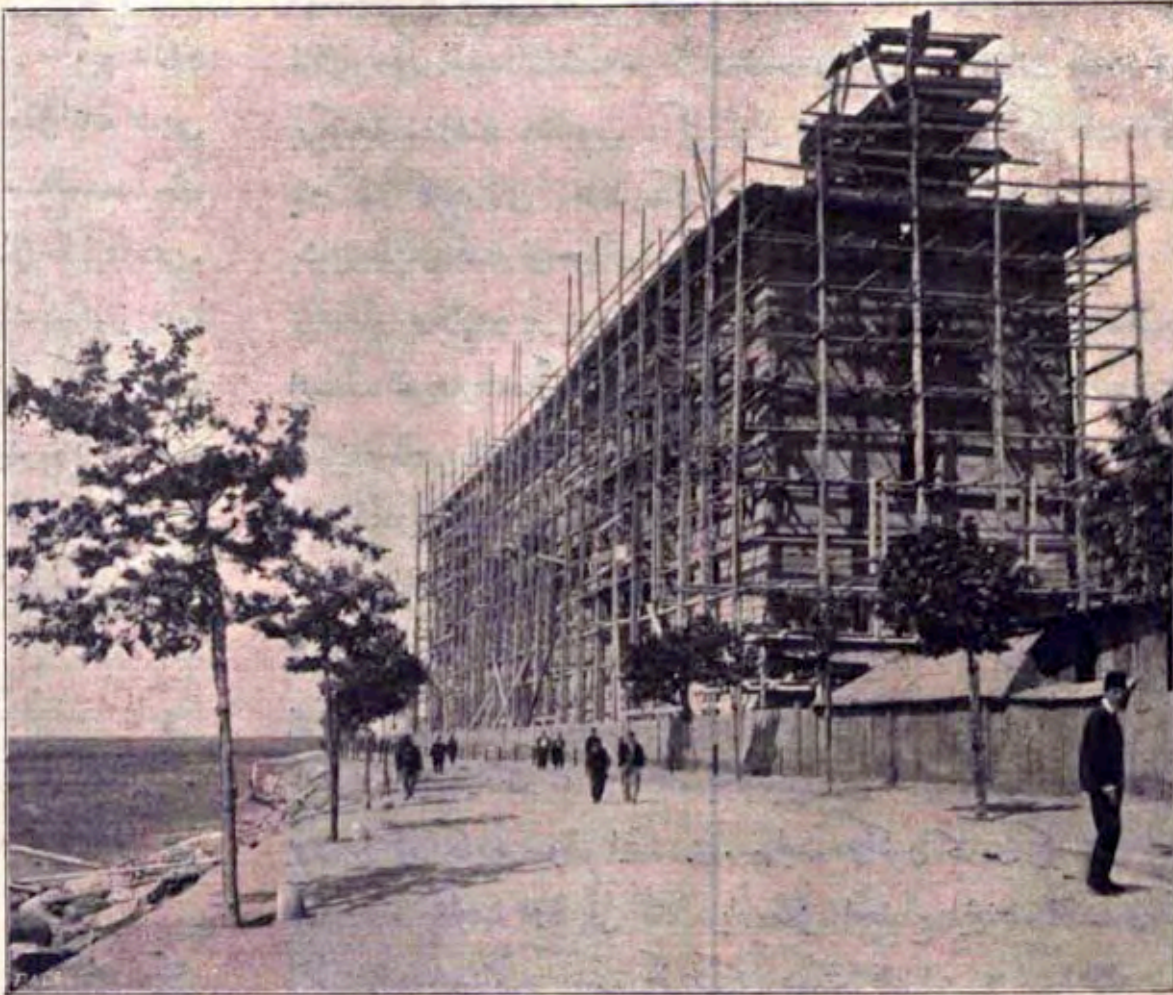


Fig. 2.51. Unknown, view of quay facilities at Haydarpaşa under construction, *Servet-i Fünun* 591 (8 Ağustos 1318).



قوس فوطوغرافيندن — Cliché Phébus

حيدر پاشا موقف جسيمى انشا اتك قاضى كوى طرفندن كوريشى
La Gare de Haïdar Pacha, en construction [côté de Kadikeuy].

Fig. 2.52. Unknown, view of Haydarpaşa station under construction, *Servet-i Fünun* 896 (12 Haziran 1324).

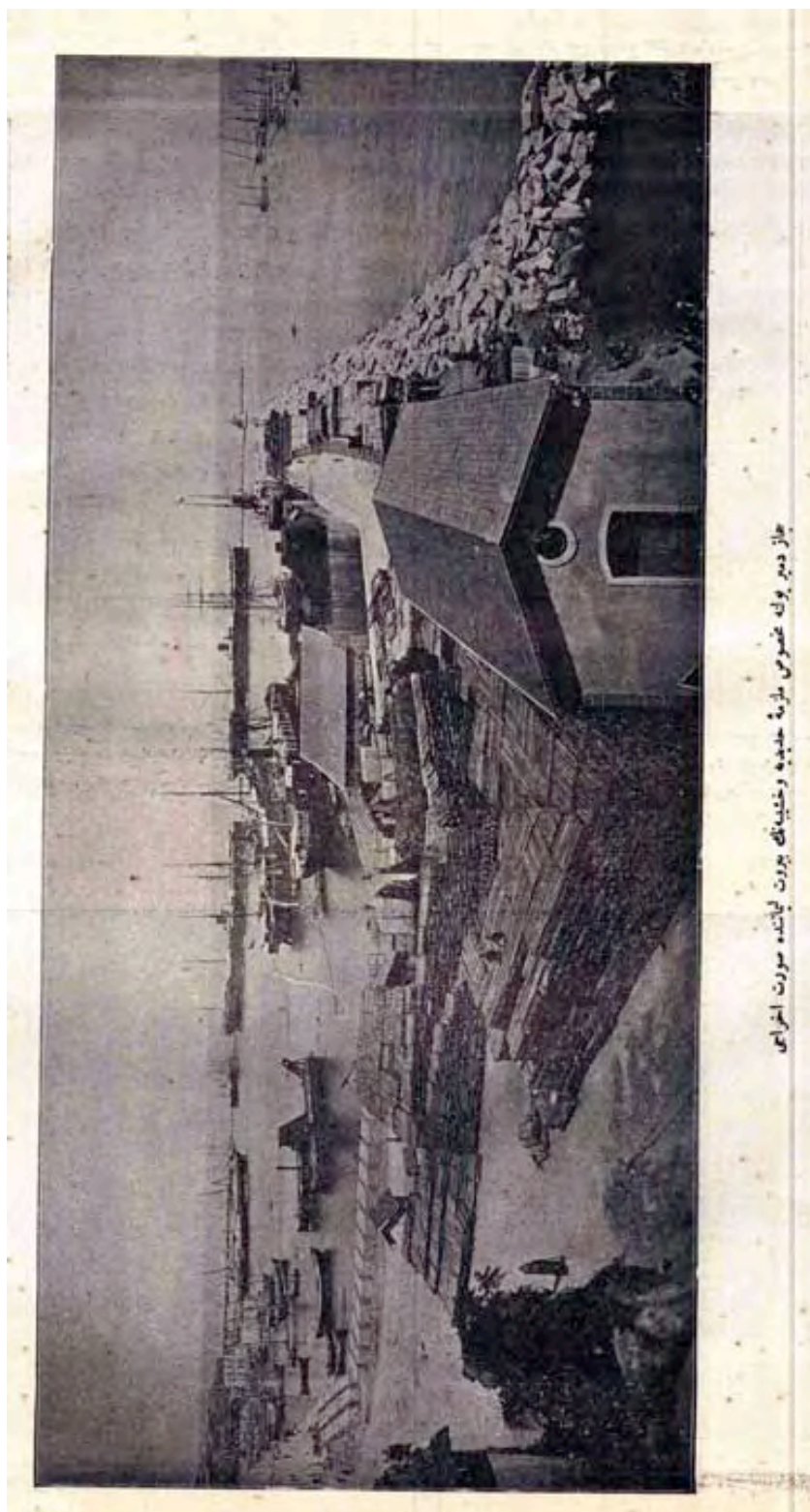
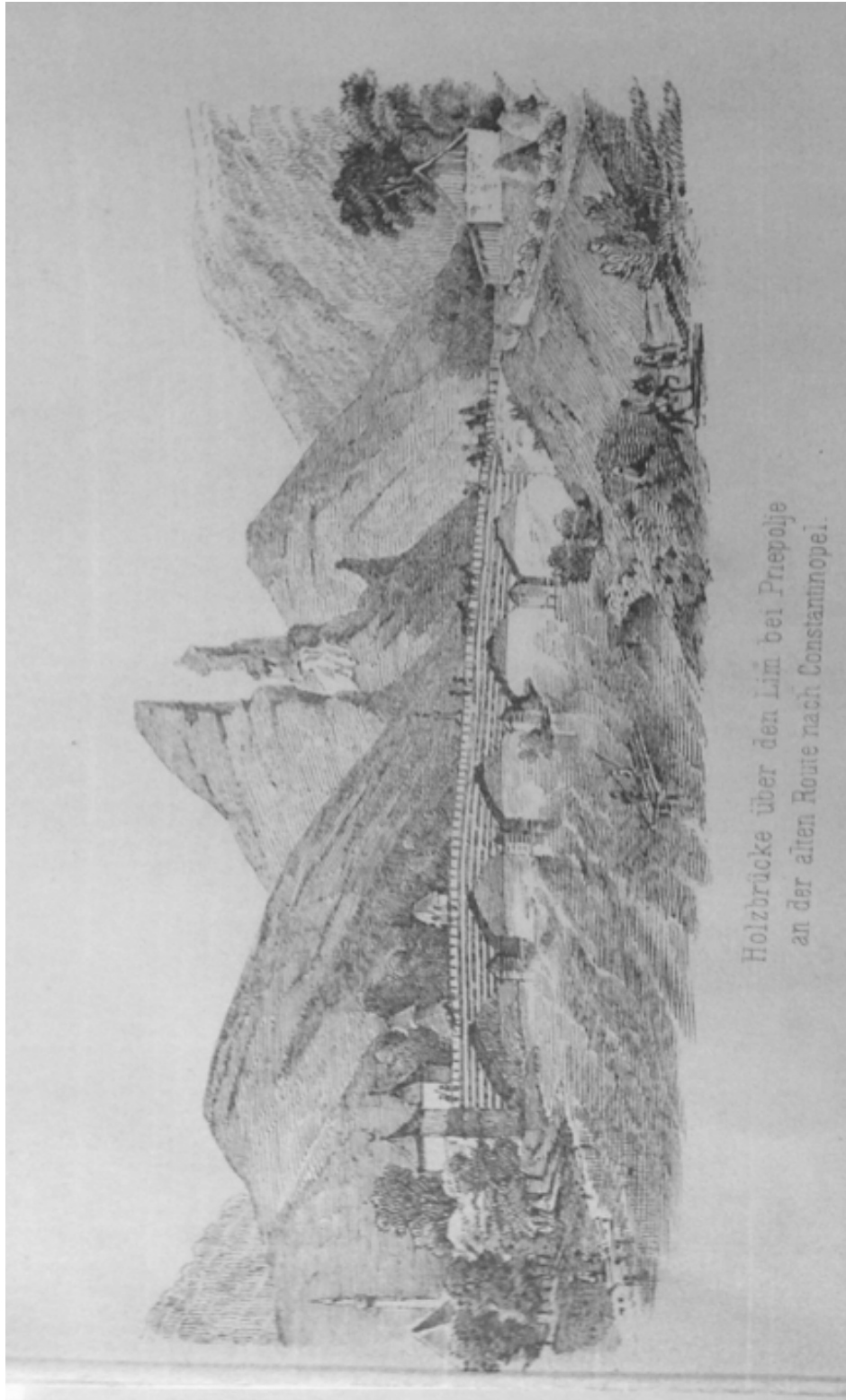


Fig. 2.54. Unknown, view of the port of Haydarpaşa, *Servet-i Fünun*, Vols. 592-593 (19 Ağustos 1318).



Holzbrücke über den Lim bei Prijepolje
an der alten Route nach Constantinopel.

Fig. 2.55. “R. v. Waldheim art Anst. Wien,” wood bridge over the Lim at Prijepolje on the old route to İstanbul, Geiger and Lebrecht, “Studien über Bosnien, die Herzegovina und die bosnischen Bahnen” (1873). DM NL 13II/26.

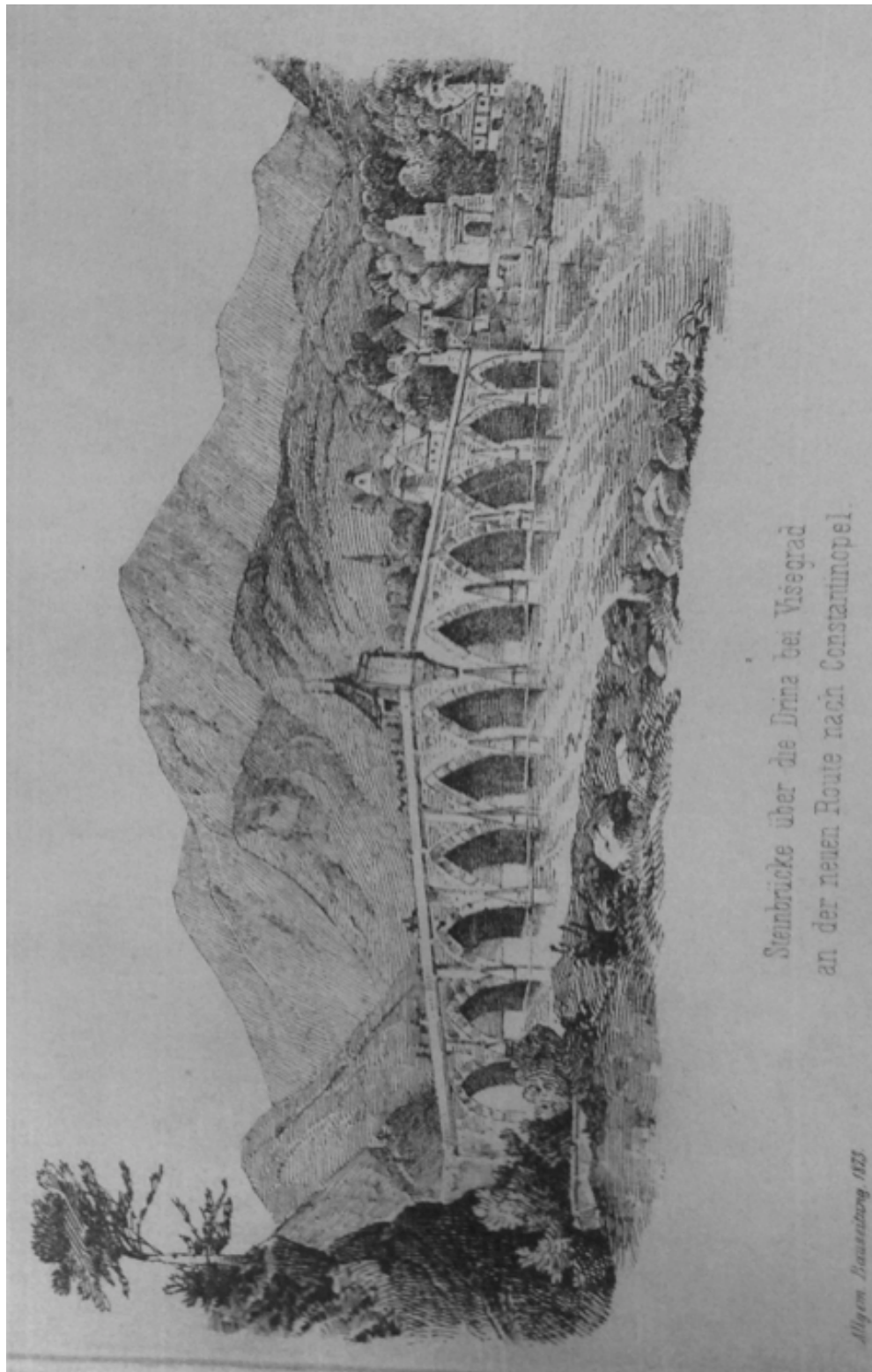


Fig. 2.56. “R. v. Waldheim art Anst. Wien,” stone bridge over the Drina at Visegrád, Geiger and Lebret, “Studien über Bosnien, die Herzegovina und die bosnischen Bahnen” (1873). DM NL 13II/26.

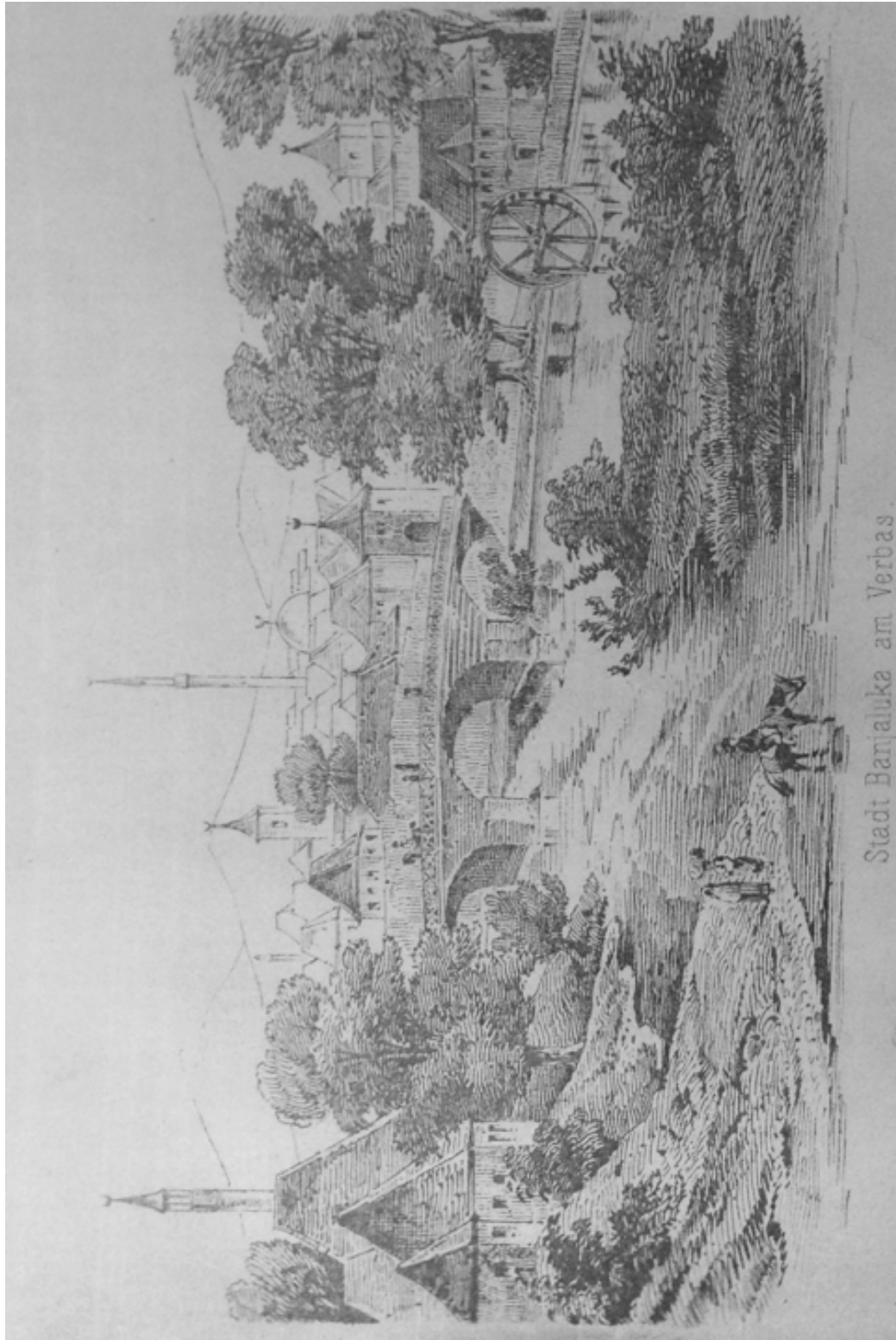


Fig. 2.57. "R. v. Waldheim art Anst. Wien," city of Banja Luka on the Verbas River, Geiger and Lebrecht, "Studien über Bosnien, die Herzegovina und die bosnischen Bahnen" (1873). DM NL 13II/26.

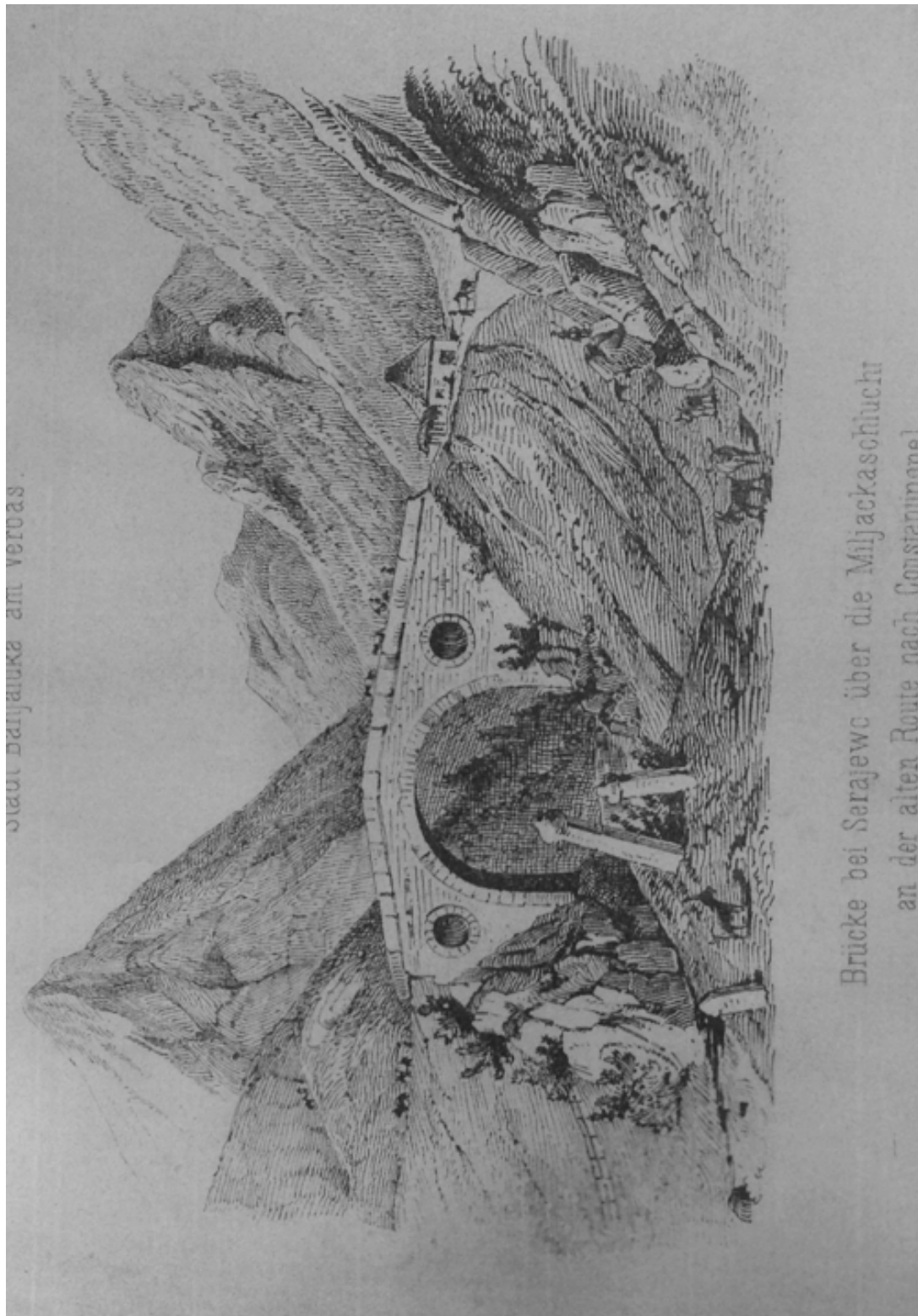


Fig. 2.58. “R. v. Waldheim art Anst. Wien,” bridge at Sarajevo over the Miljacka Gorge on the old Route to İstanbul, Geiger and Lebret, “Studien über Bosnien, die Herzegovina und die bosnischen Bahnen” (1873). DM NL 13II/26.

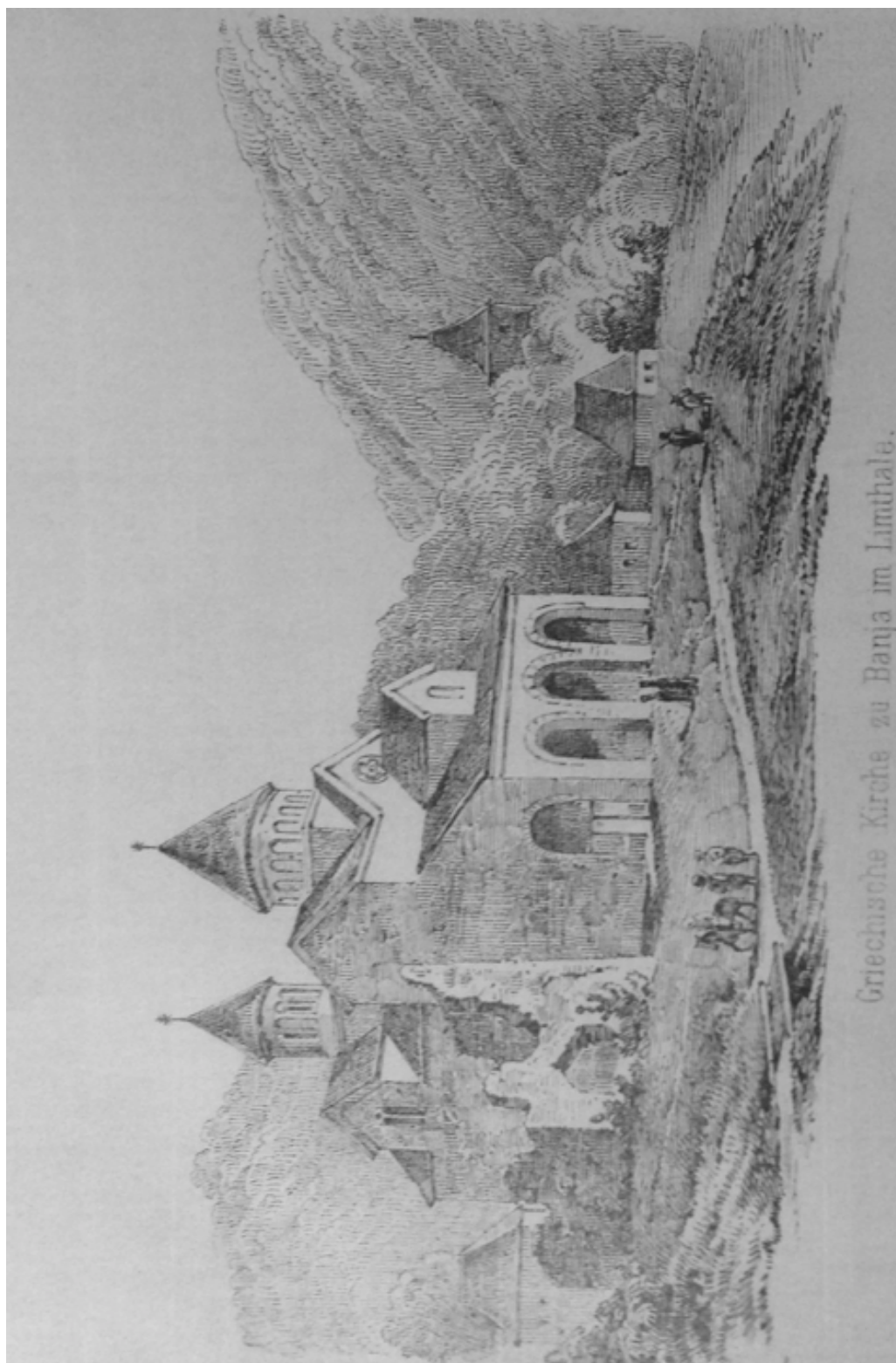


Fig. 2.59. “R. v. Waldheim art Anst. Wien,” Greek church of Banja in the Lim Valley, Geiger and Lebrecht, “Studien über Bosnien, die Herzegovina und die bosnischen Bahnen” (1873). DM NL 13II/26.

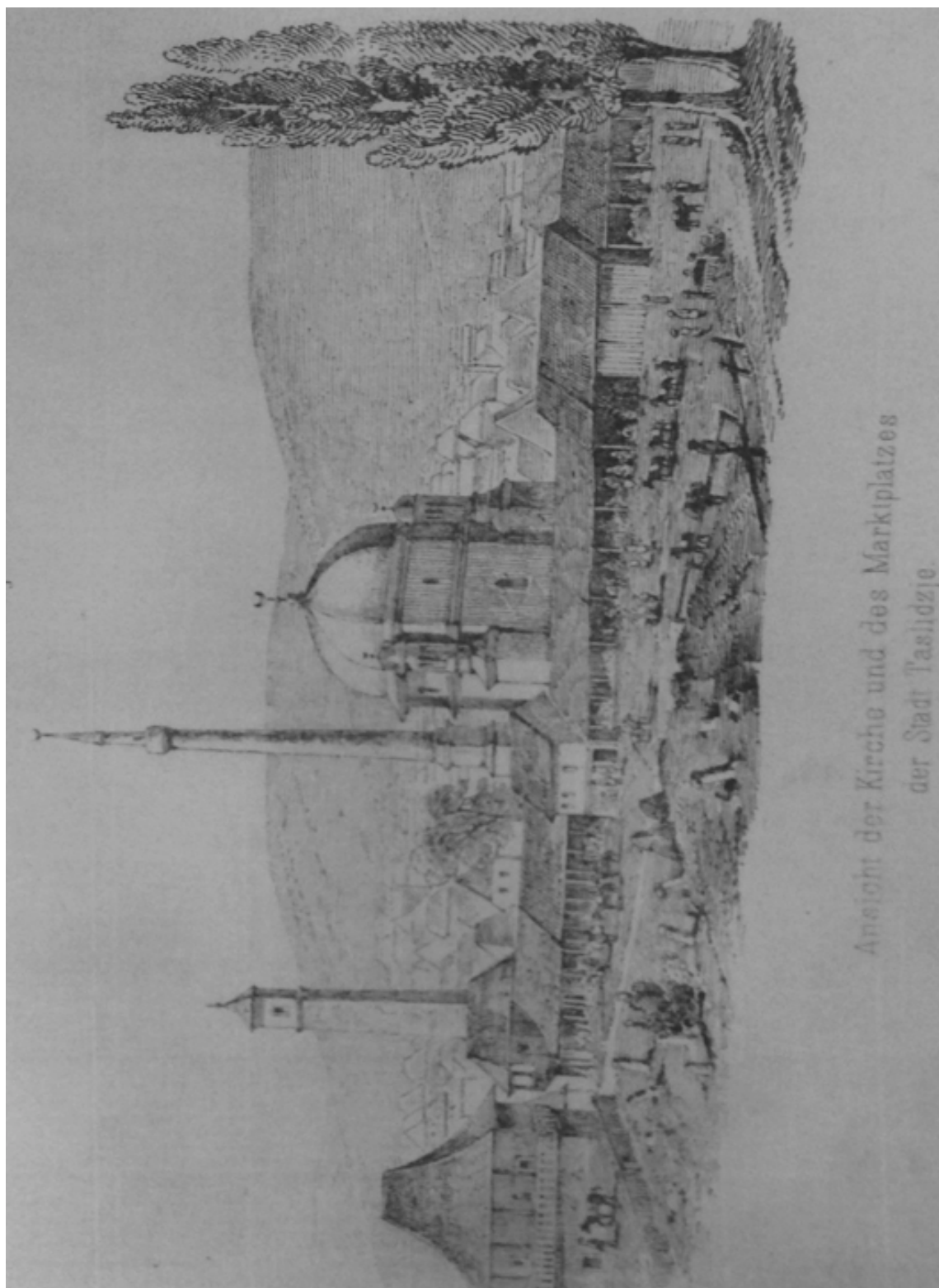


Fig. 2.60. “R. v. Waldheim art Anst. Wien,” view of the church and market square of Pljevlja (Taşlica), Geiger and Lebret, “Studien über Bosnien, die Herzegovina und die bosnischen Bahnen” (1873). DM NL 13II/26.

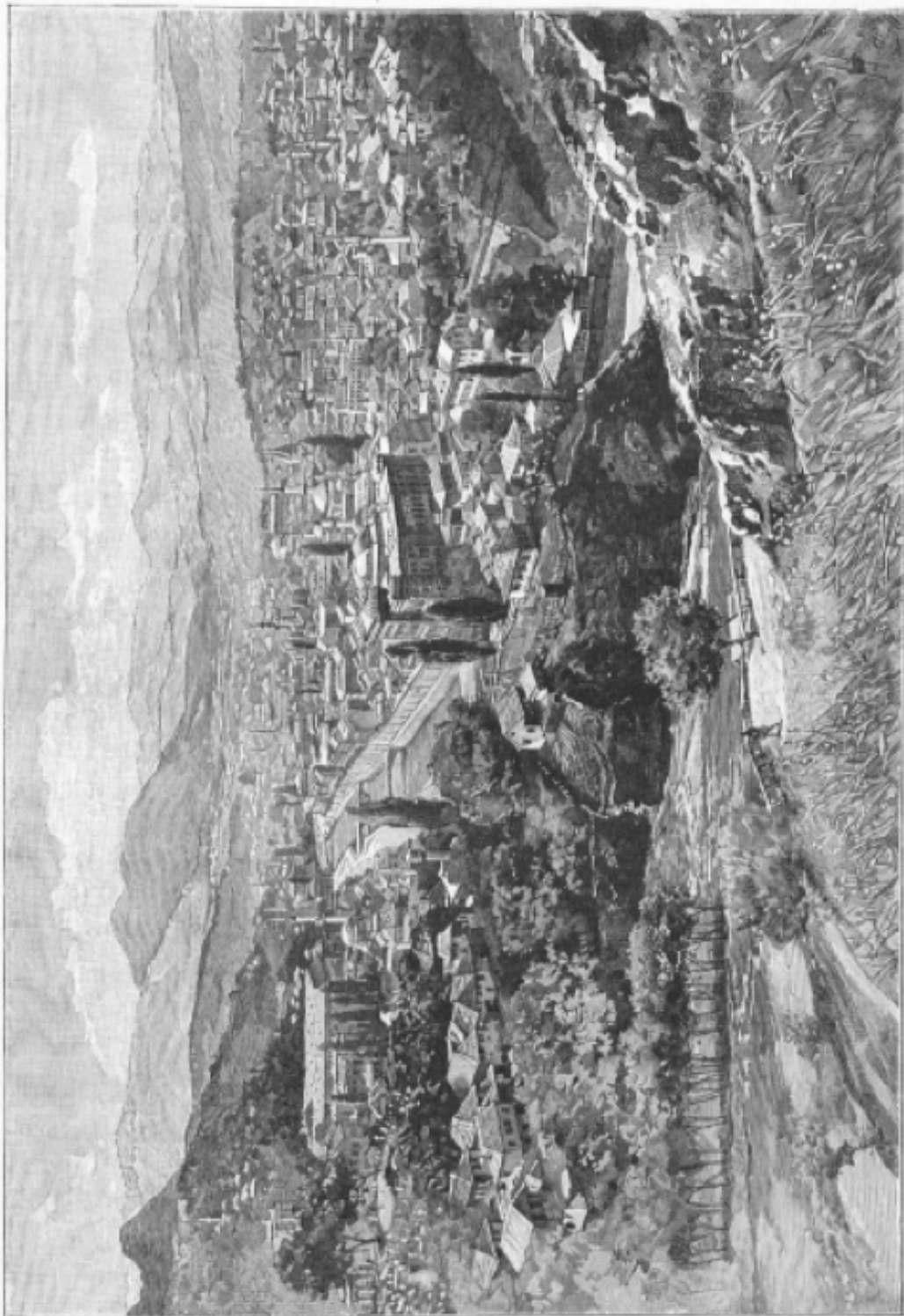
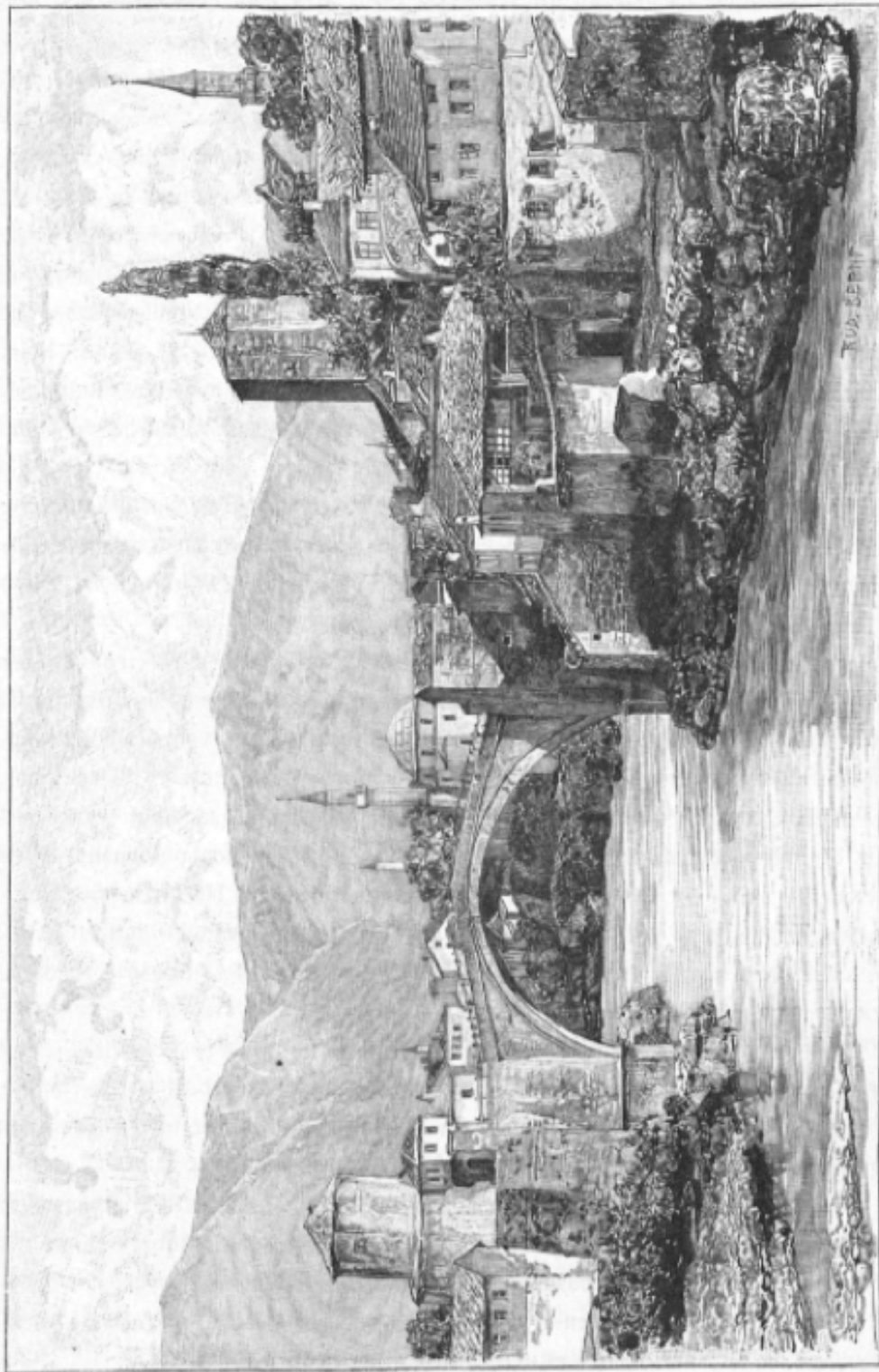


Fig. 2.61. “H,” view of Sarajevo, *Die österreichisch-ungarische Monarchie in Wort und Bild XXII, Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 47.



Fig. 2.62. Unknown, Postcard of the Bistrik district of Sarajevo showing railway tunnel, c. 1904. Wikimedia Commons.



Die alte Brücke in Mostar.

Fig. 2.63. R. Bernt, view of the Old bridge at Mostar, *Die österreichisch-ungarische Monarchie in Wort und Bild XXII, Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 133.



Fig. 2.64. Unknown, view of Begova mosque, Sarajevo, *Die österreichisch-ungarische Monarchie in Wort und Bild XXII, Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 435.



Ruß dem Innern der Hadscha-Moschee in Zola.

Fig. 2.65. Unknown, interior view of mosque in Zola, *Die österreichisch-ungarische Monarchie in Wort und Bild XXII, Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 437.

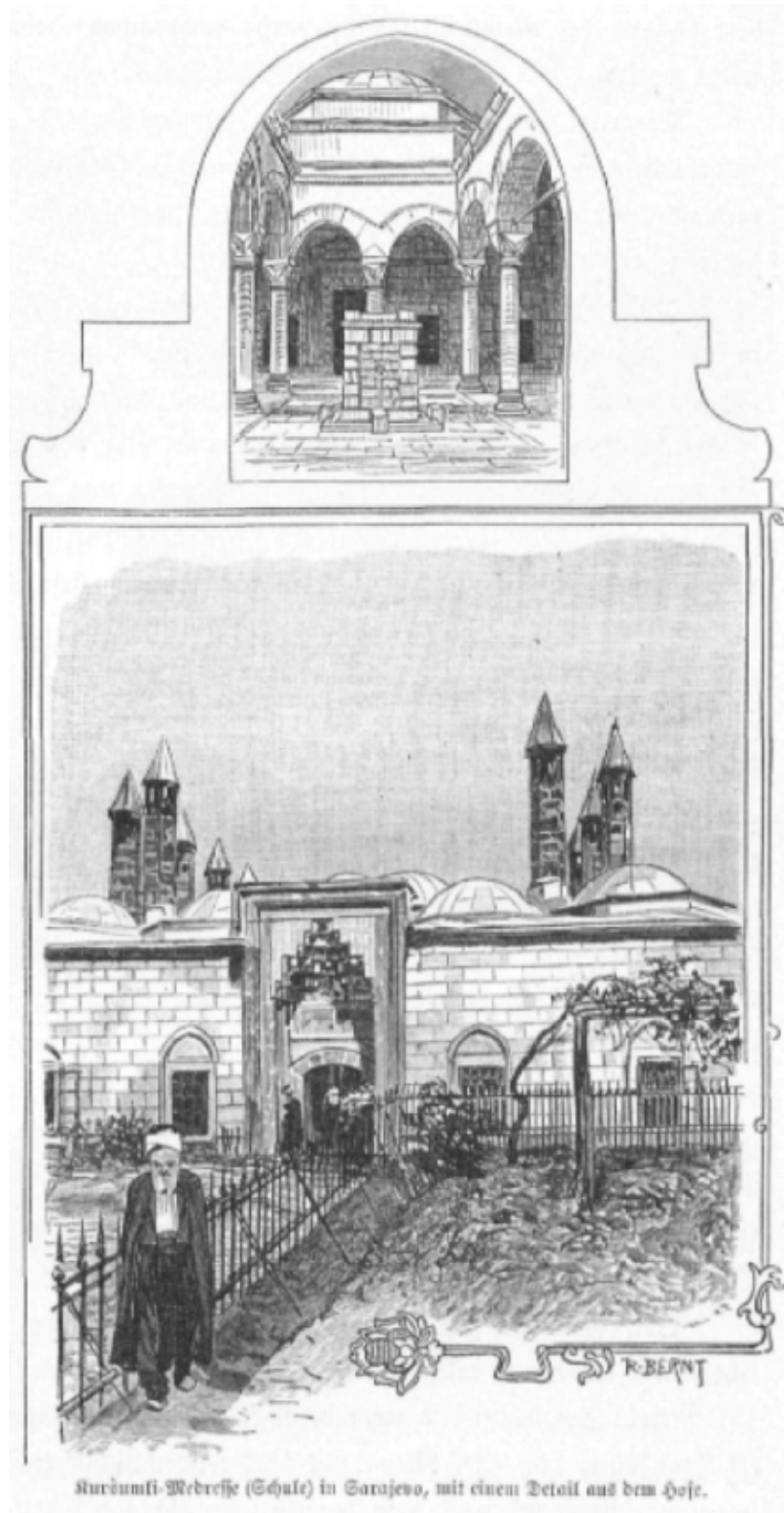
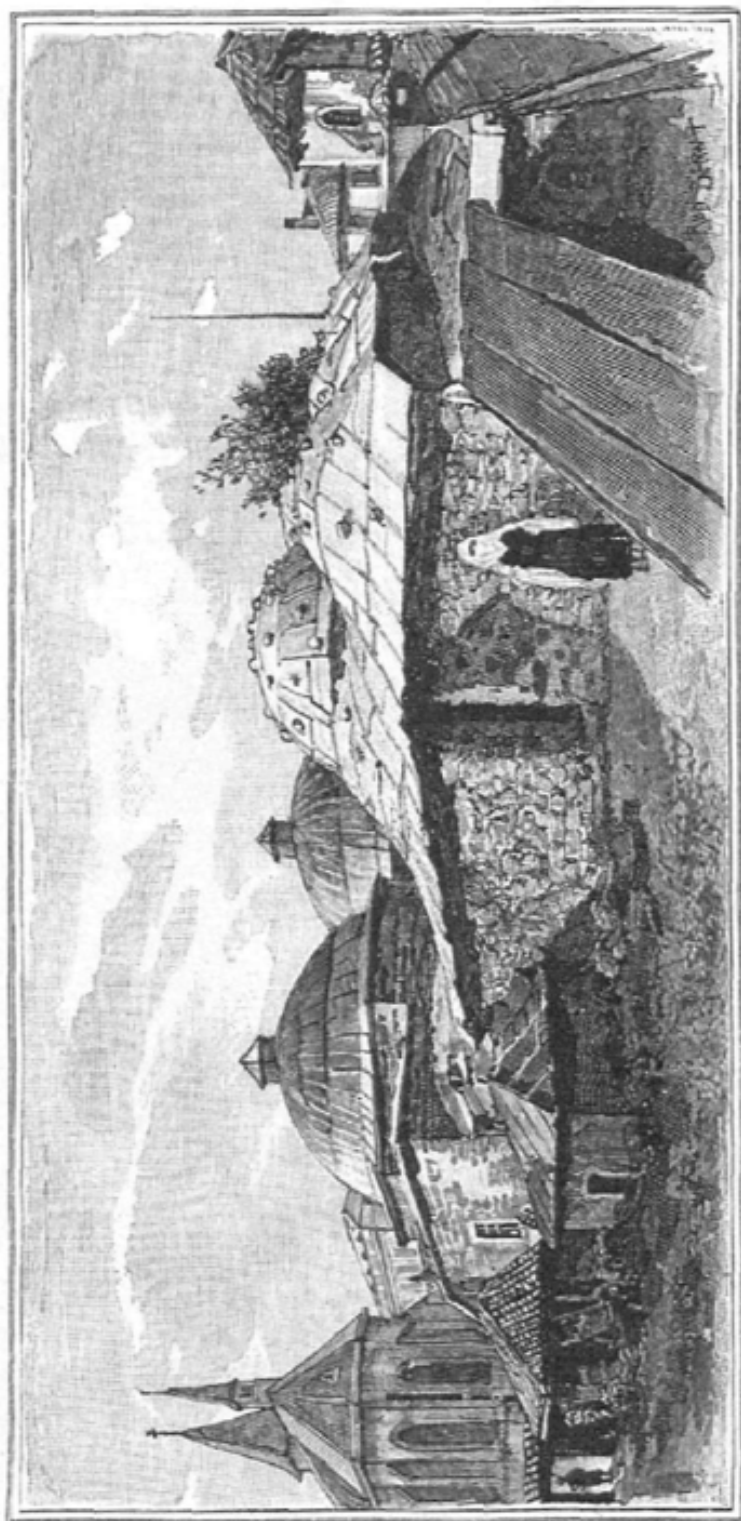


Fig. 2.66. R. Bernt, view of Sarajevo madrasa, *Die österreichisch-ungarische Monarchie in Wort und Bild XXII, Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 439.



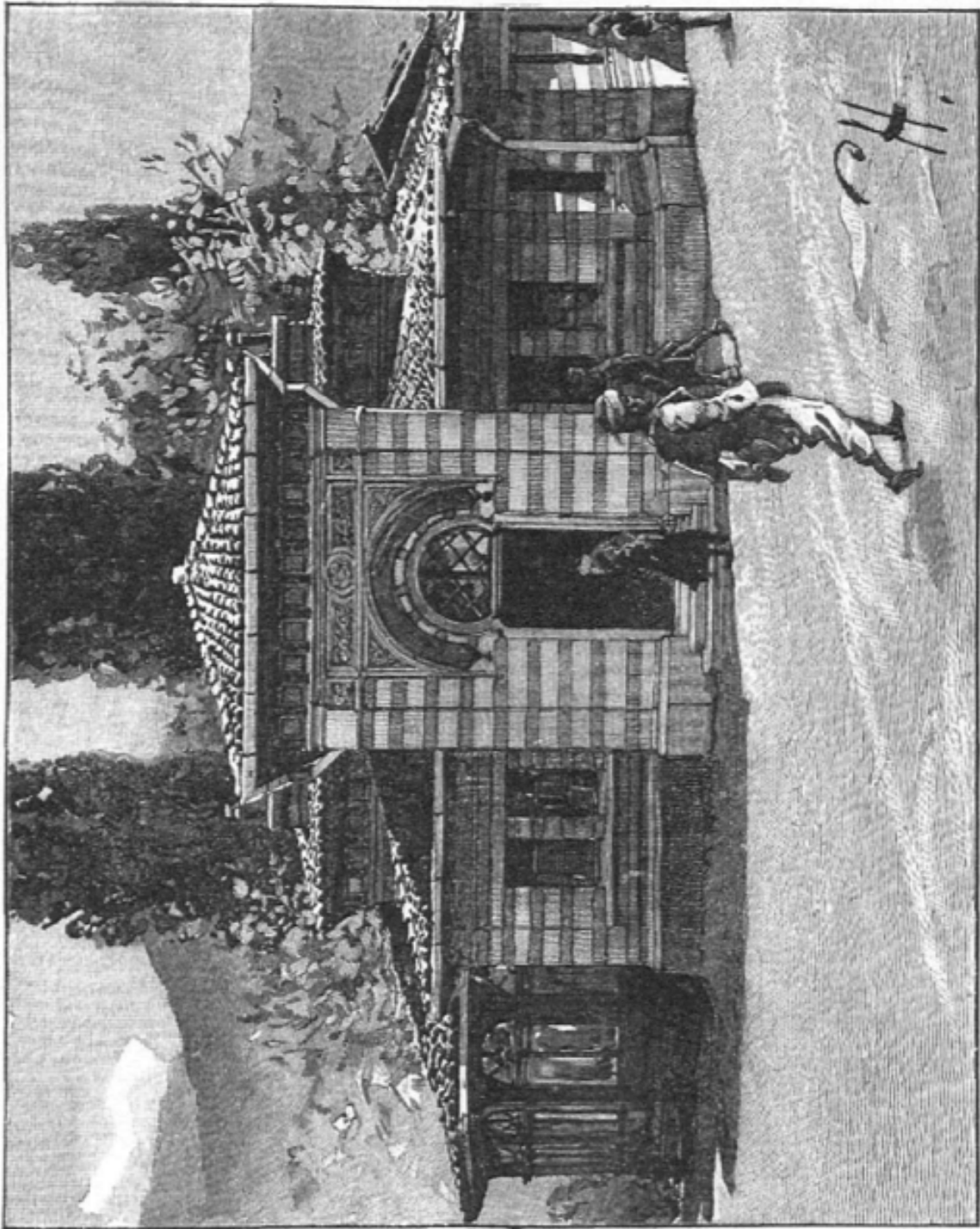
Die Sinan Tekija (mohammedanisches Kloster) in Sarajevo.

Fig. 2.67. R. Bernt, view of the Sinan Tekiye, *Die österreichisch-ungarische Monarchie in Wort und Bild XXII, Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 441.



Das alte türkische Bad in Sarajevo.

Fig. 2.68. R. Bernt, view of the old Turkish baths in Sarajevo, *Die österreichisch-ungarische Monarchie in Wort und Bild XXII, Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 442.



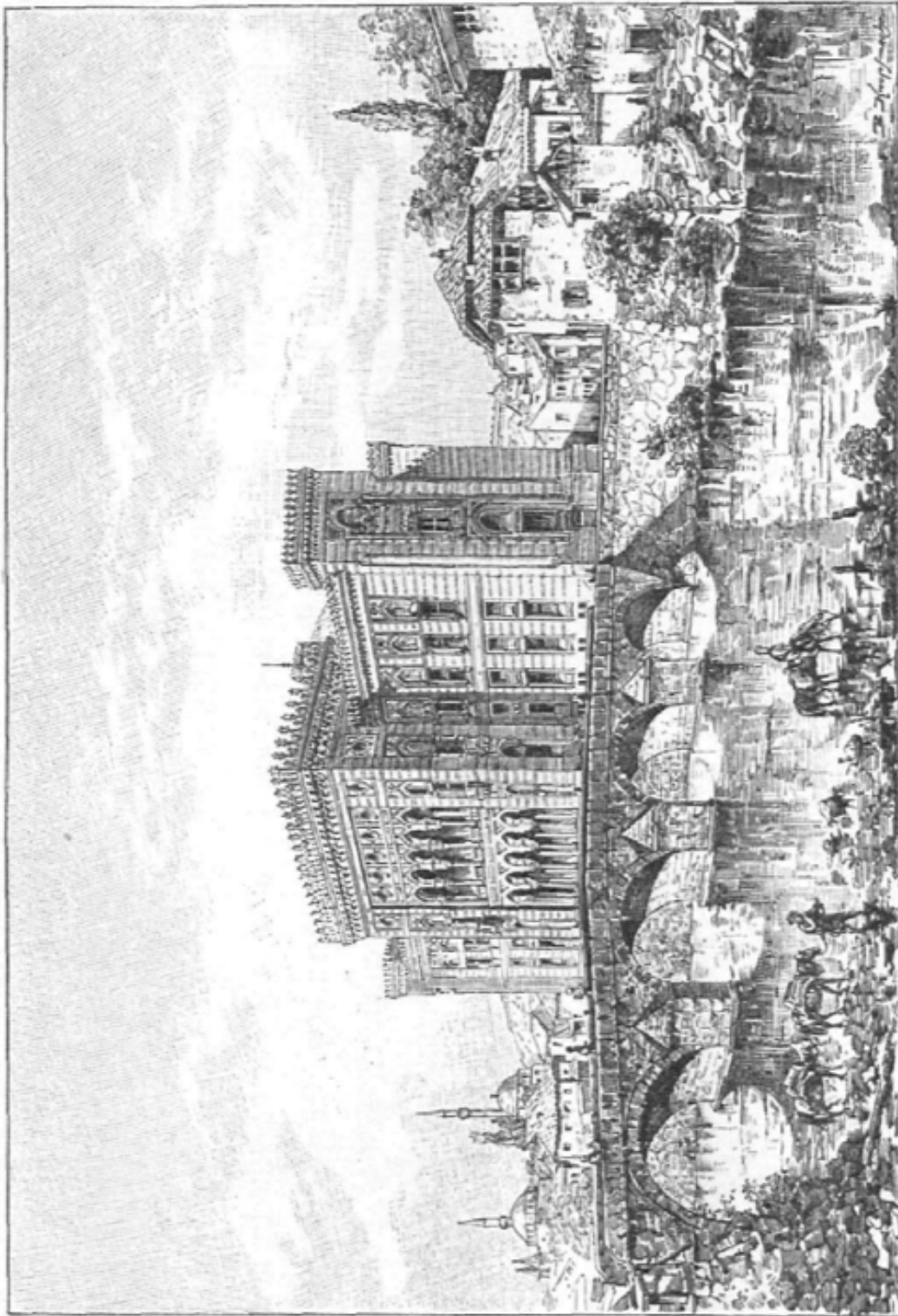
Das mohammedanische Casino in Sarajevo.

Fig. 2.69. “H,” view of the Muslim “casino” in Sarajevo, *Die österreichisch-ungarische Monarchie in Wort und Bild XXII, Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 445.



Die Scheriat-Richterichule in Sarajevo.

Fig. 2.70. C. Pascek, view of the Sarajevo seminary, *Die österreichisch-ungarische Monarchie in Wort und Bild XXII, Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 447.



Das neue Rathaus in Sarajevo.

Fig. 2.71. B. Knopfmacher, view of the Sarajevo City Hall, *Die österreichisch-ungarische Monarchie in Wort und Bild XXII, Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 449.



Fig. 2.72. R. Bernt, view of railway bridge in Bosnia, *Die österreichisch-ungarische Monarchie in Wort und Bild XXII, Bosnien und Hercegovina* (Vienna: Druck und Verlag der kaiserlich-königlichen Hof- und Staatsdruckerei, 1901), 519.

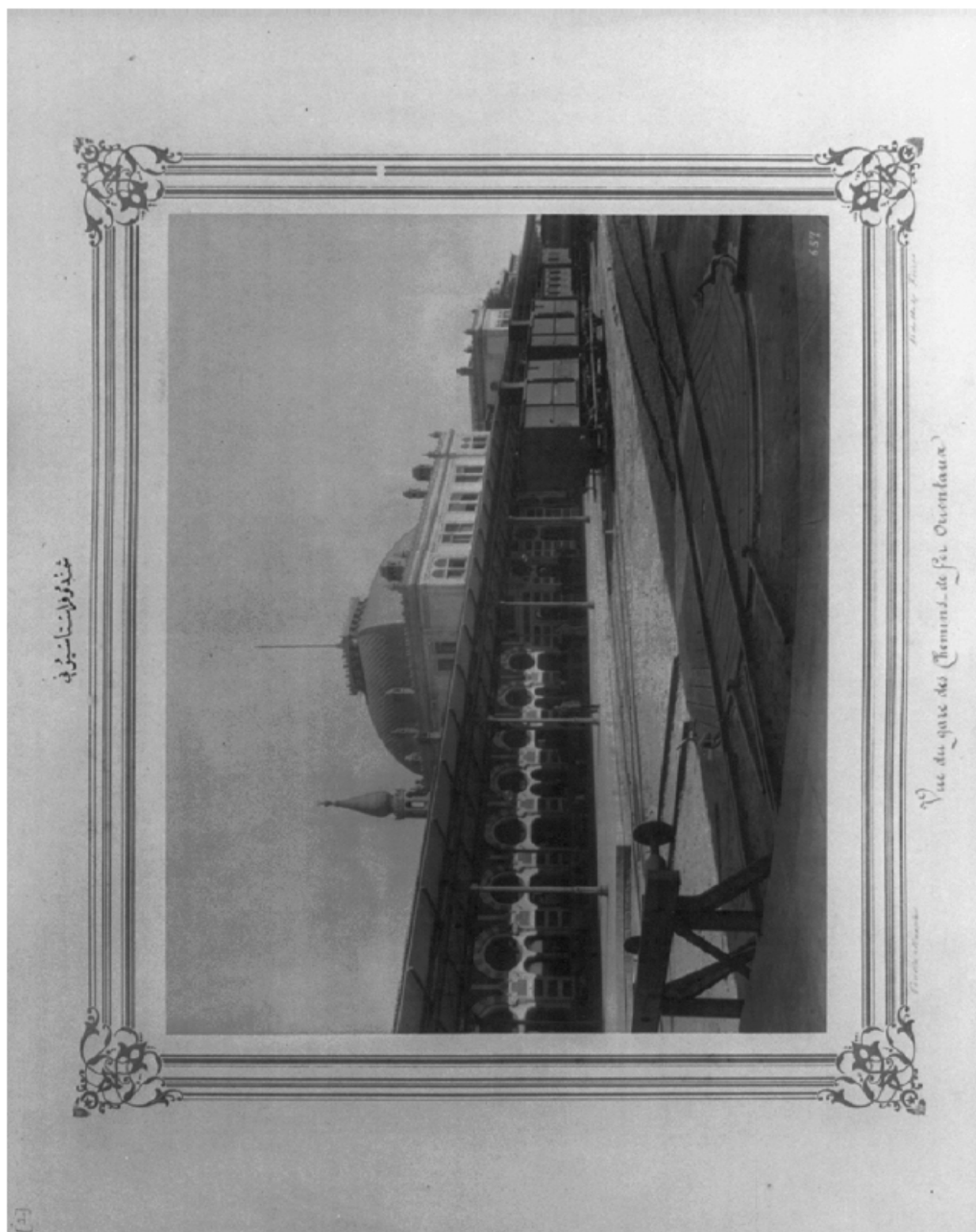


Fig. 2.73. Abdullah Frères, exterior view of Sirkeci Station, between 1880 and 1893, Abdul Hamid II collection. LOC lot 9534, no. 2.



Fig. 2.74. Unknown, view of the Port of Haydarpaşa, between 1880 and 1893, Abdul Hamid II Collection. LOC lot 9523, no. 27.

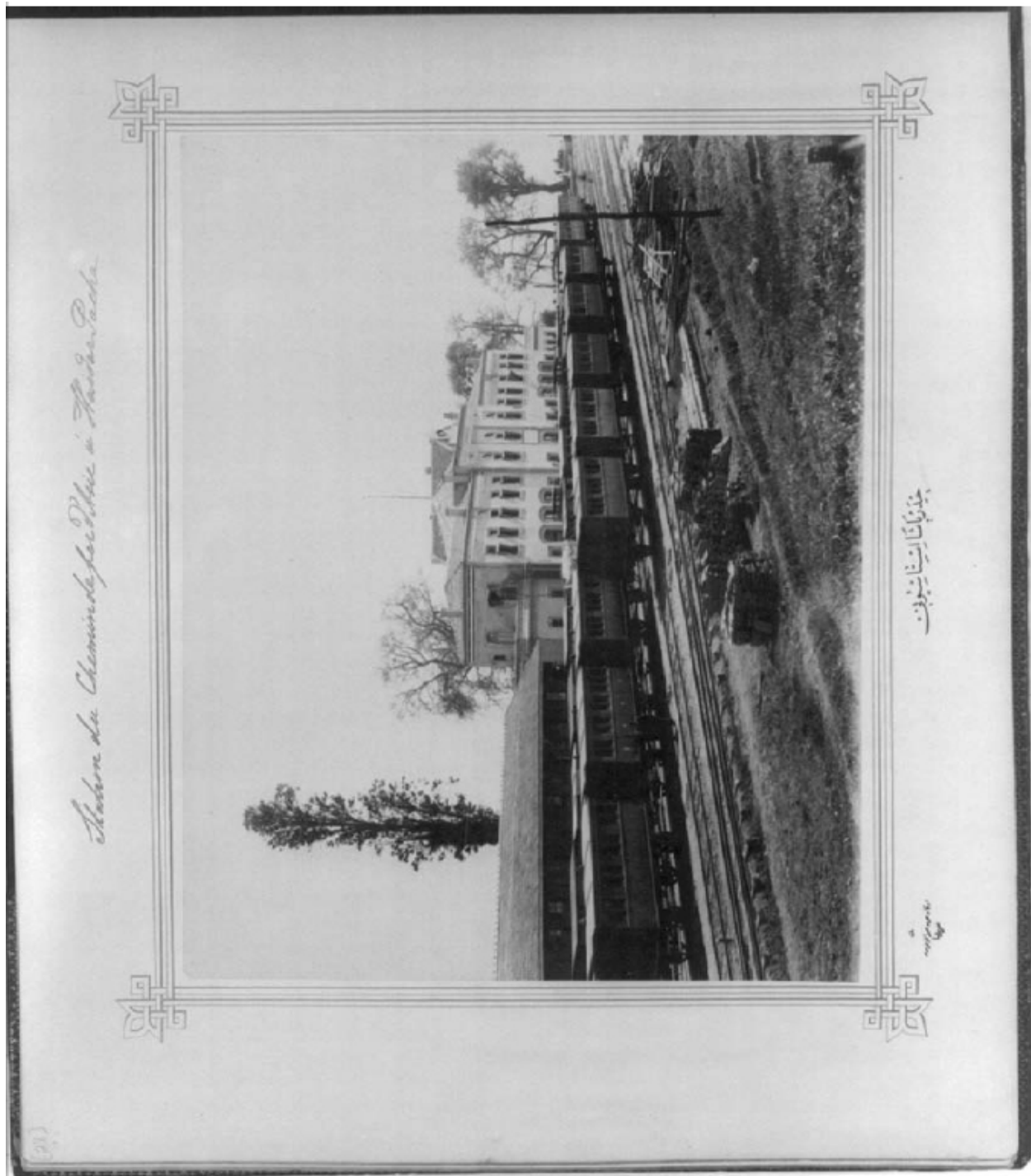


Fig. 2.75. Unknown, railroad station at Haydarpaşa, between 1880 and 1893, Abdul Hamid II Collection. LOC lot 9523, no. 28.



Fig. 2.76. Unknown, side view Haydarpaşa railway station, between 1880 and 1893, Abdul Hamid II Collection. LOC lot 9523, no. 29.

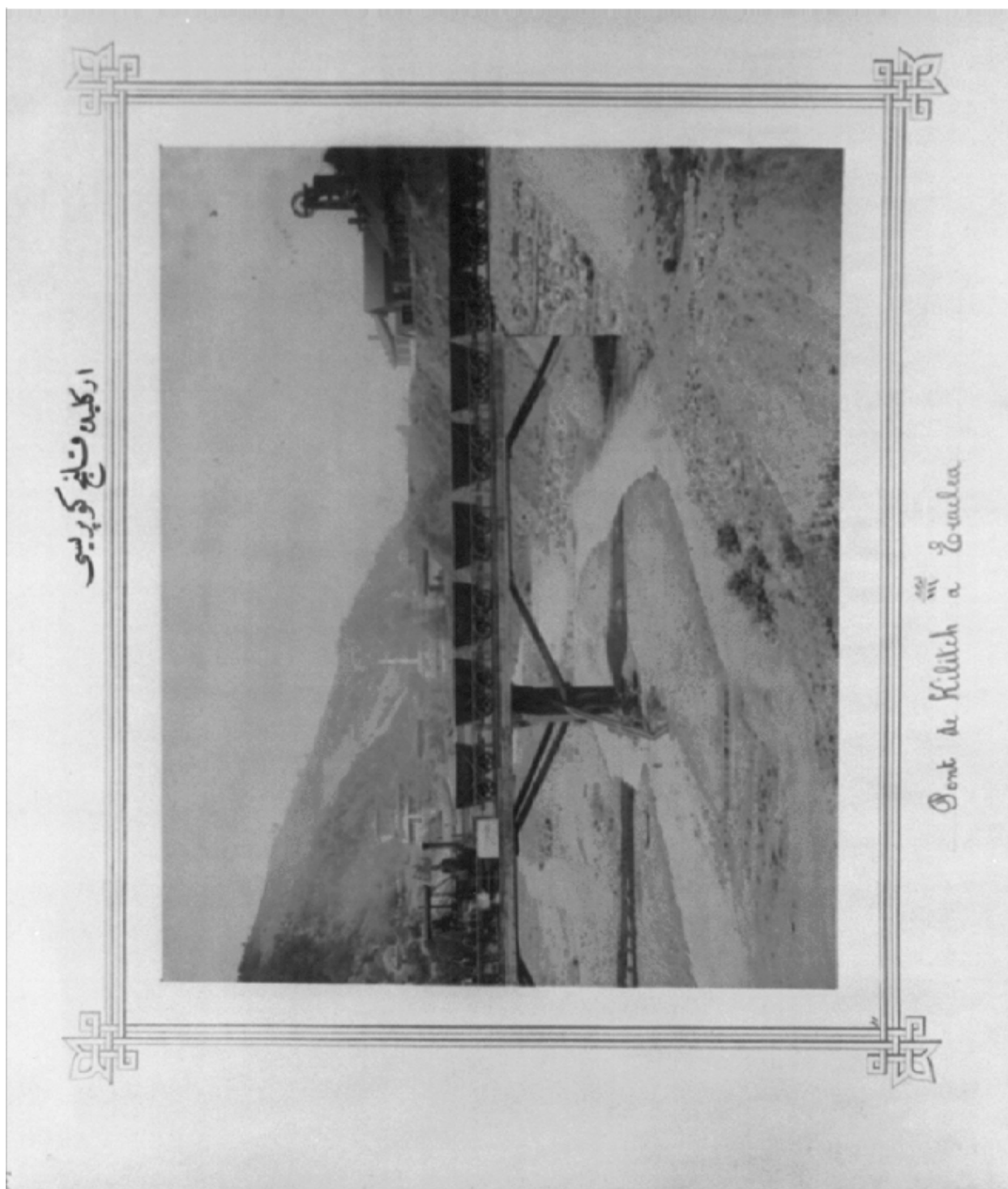


Fig. 2.77. Unknown, the Kılınç rail bridge at Heraclea, between 1880 and 1893, Abdul Hamid II Collection. LOC lot 11915, no. 28.



Fig. 2.78. Unknown, view of the coke furnaces at Heraclea and their narrow gauge rail, between 1880 and 1893, Abdul Hamid II Collection. LOC lot 11915, no. 26.

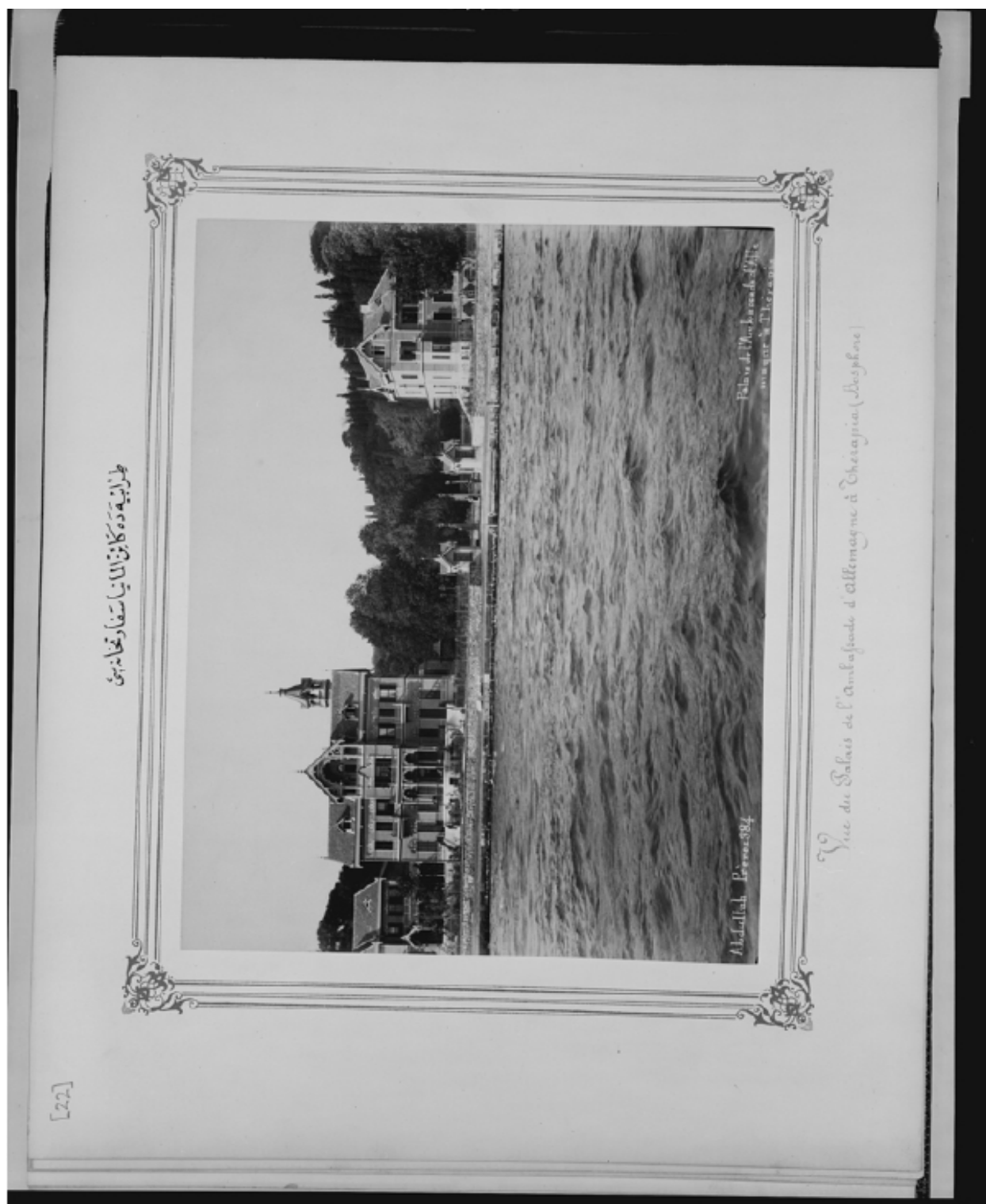


Fig. 2.79. Abdullah Frères, German embassy at Tarabya, between 1880 and 1893, Abdul Hamid II collection. LOC lot 9516, no. 22.



Fig. 2.80. Theodor Rocholl, album cover, *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.81. Theodor Rocholl, “Hilltop ruins at Gebze on the Gulf of İzmit,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Griechisches Mädchen

Fig. 2.82. Theodor Rocholl, "Greek girl," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Bahnwärter an der Anatolischen Eisenbahn

Fig. 2.83. Theodor Rocholl, "Train attendant of the Anatolian Railway," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.

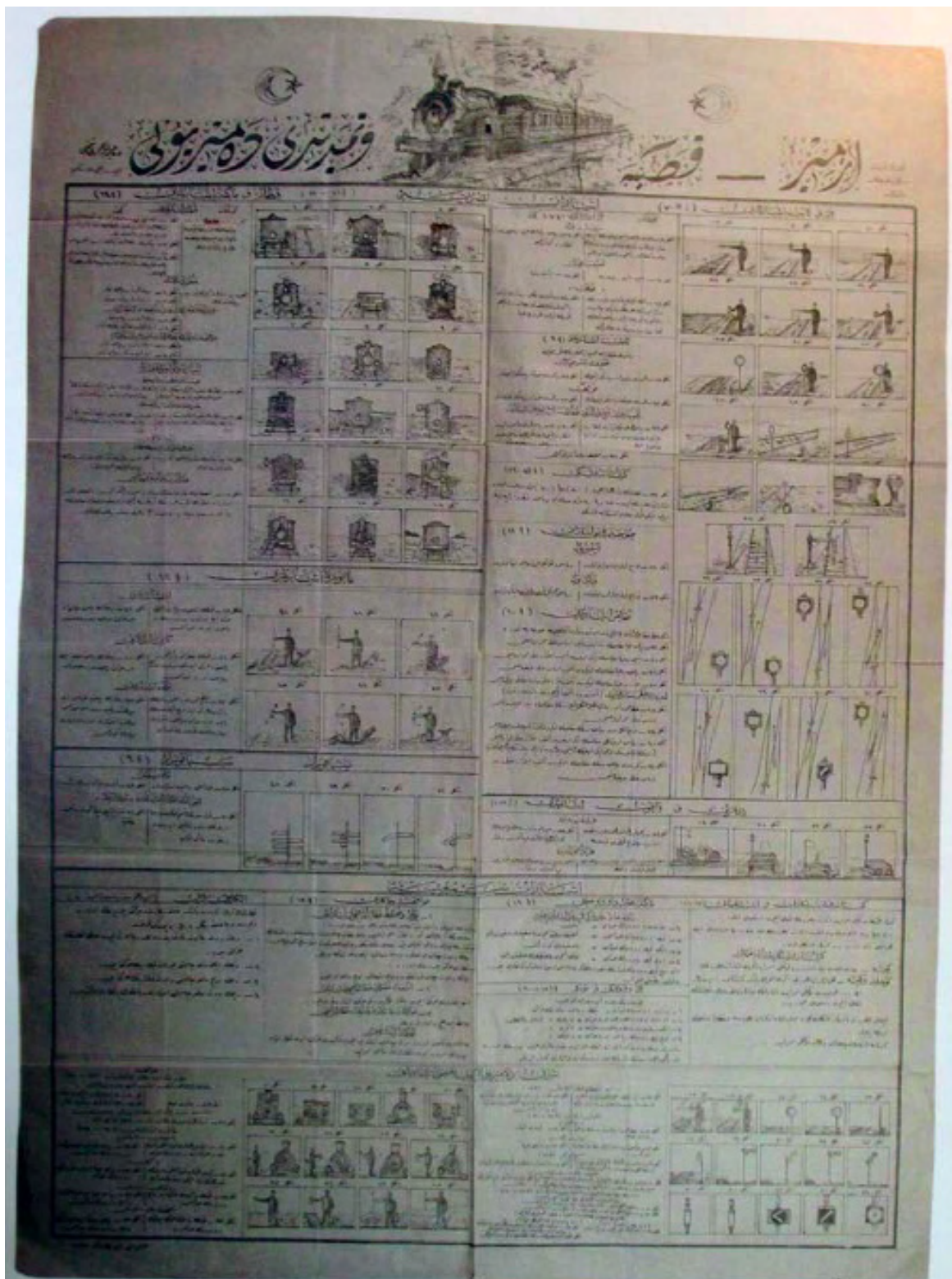


Fig. 2.84. Ottoman instruction sheet for the operation of trains, c. 1870. Courtesy Aybala-Nejat Yentürk Collection.



Fig. 2.85. Theodor Rocholl, "Railway track along the Gulf of İzmit," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.86. Theodor Rocholl, "Greek house," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.87. Theodor Rocholl, "İzmit," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.88. Theodor Rocholl, "Circassian girl," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.

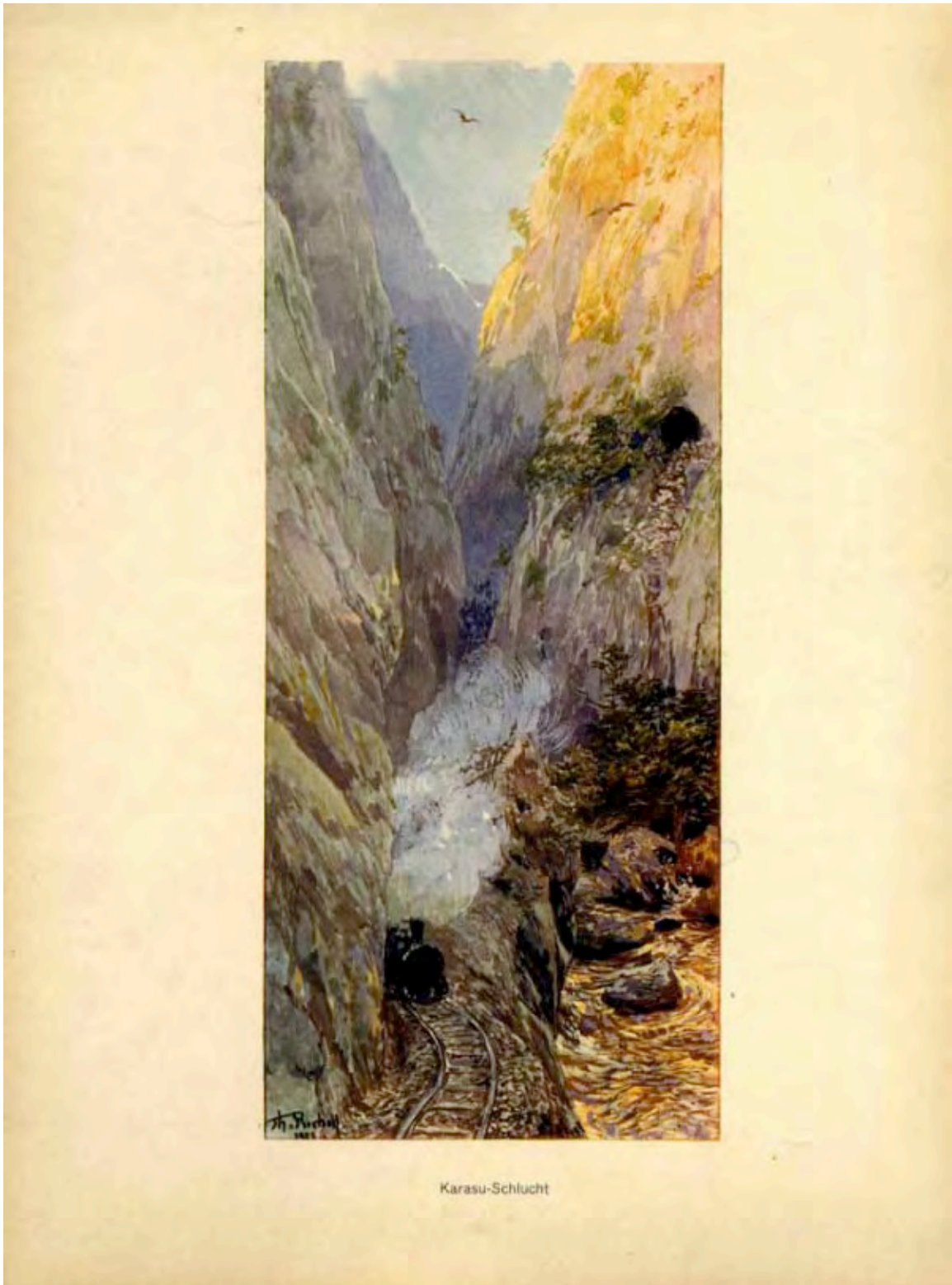


Fig. 2.89. Theodor Rocholl, "Karasu Gorge," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.90. Theodor Rocholl, "Farmer in Bilecik," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.91. Theodor Rocholl, "Farmer in Anatolia," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.92. Theodor Rocholl, “Sea foam merchant,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.93. Theodor Rocholl, “Wagon driver in Eskişehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.

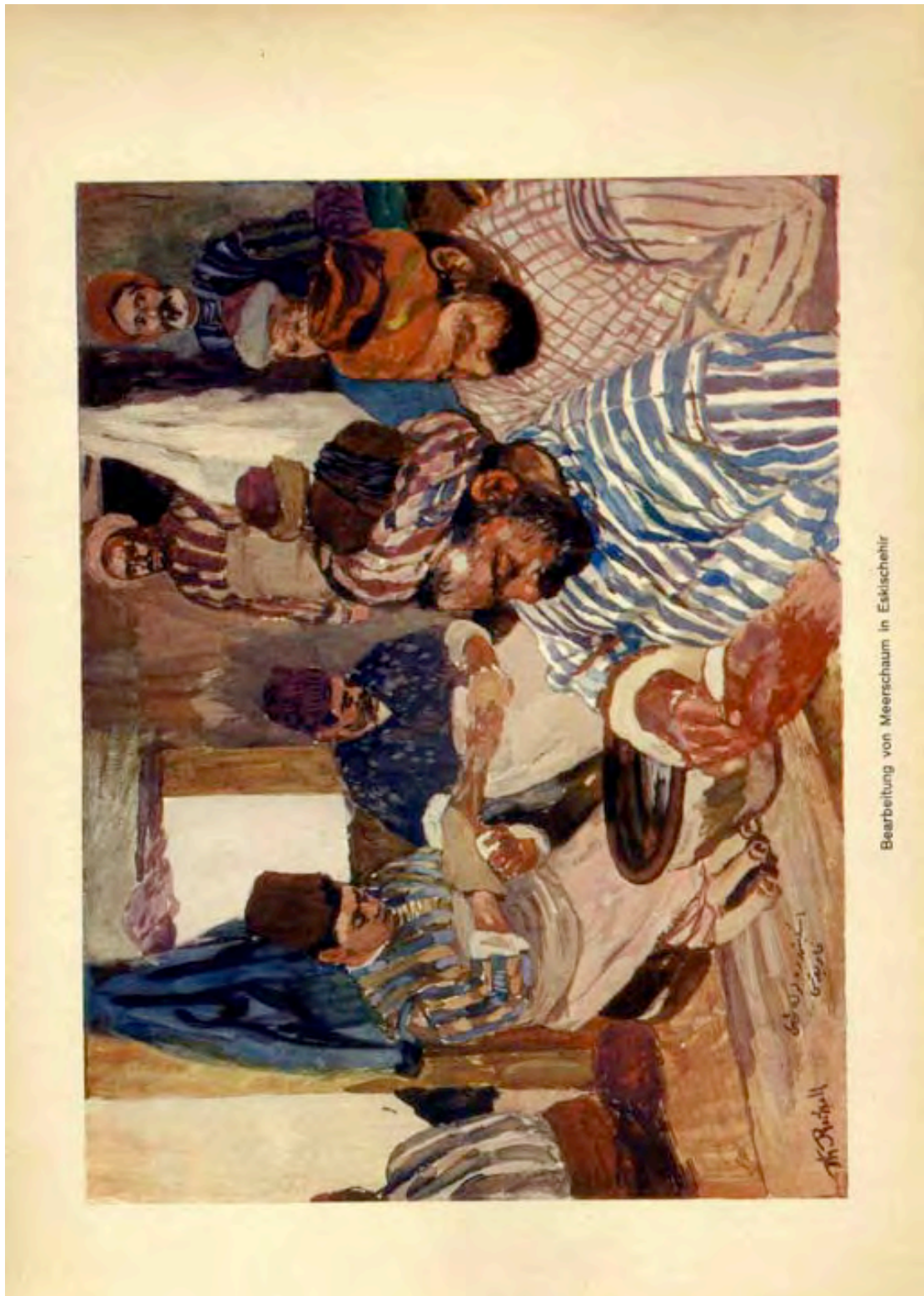


Fig. 2.94. Theodor Rocholl, “Sea foam production in Eskişehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.95. Postcard, view of a Meerschaum workshop near Eskişehir, c. 1910. Wikimedia Commons.



Fig. 2.96. Theodor Rocholl, "Farmer from the area of Eskişehir," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.97. Theodor Rocholl, “Sea foam salesman in Eskişehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.98. Theodor Rocholl, “Afyonkarahisar,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.99. Theodor Rocholl, “En route to Beyşehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.100. Theodor Rocholl, “Beyşehir,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.101. Theodor Rocholl, "Door to the tomb of Süleyman bin Eshref in Beyşehir," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



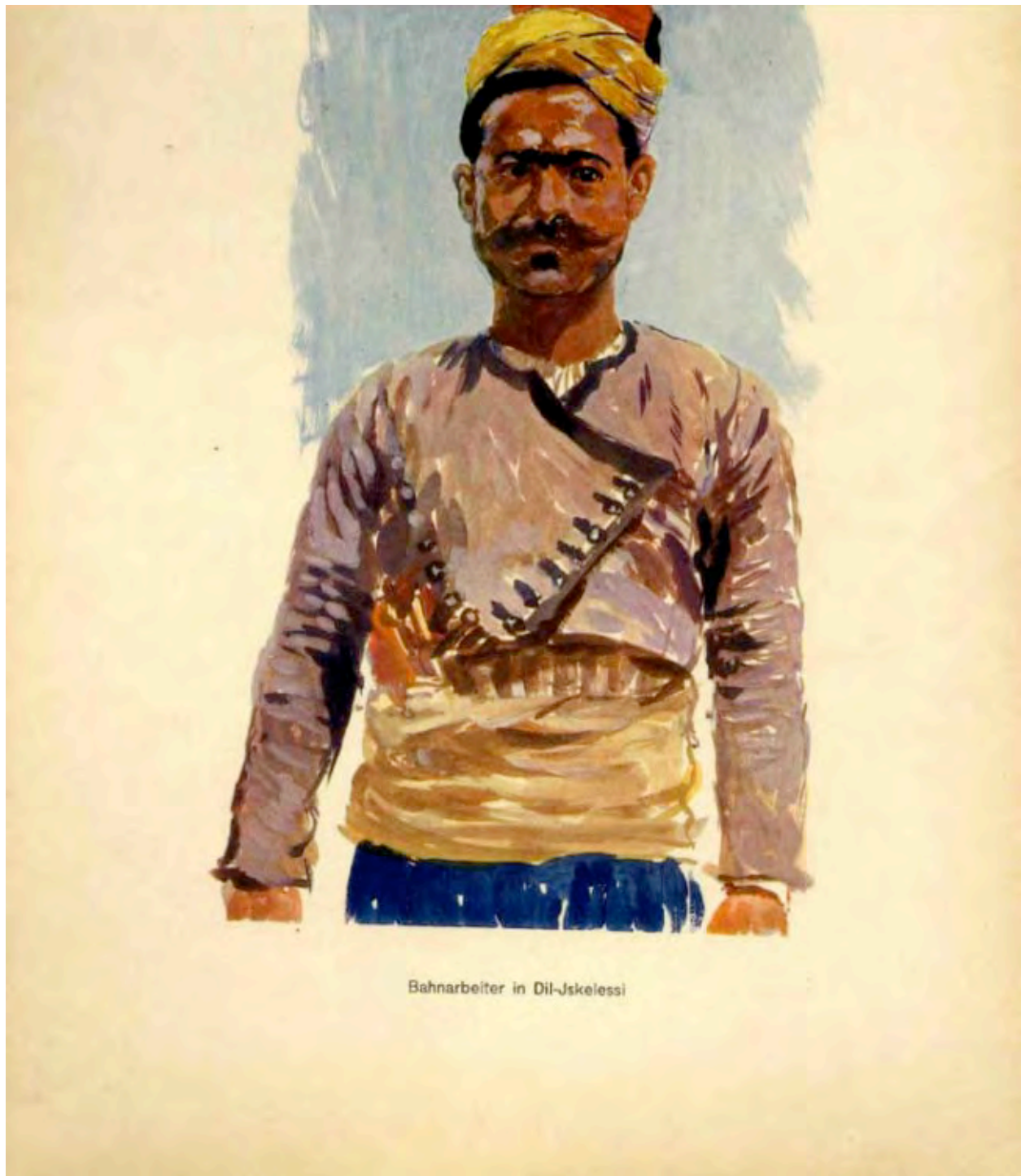
Fig. 2.102. Theodor Rocholl, "Süleymaniye Mosque in Beyşehir," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.103. Theodor Rocholl, "On Lake Beyşehir," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.104. Theodor Rocholl, “Karaağaç,” *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Bahnarbeiter in Dil-Jskelessi

Fig. 2.105. Theodor Rocholl, "Train worker at Diliskelesi," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.106. Theodor Rocholl, "Kızılviran," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.107. Theodor Rocholl, "Permata," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.108. Theodor Rocholl, "Old bridge at Karahisar," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.109. Theodor Rocholl, "Circassian boy in Konya," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.



Fig. 2.110. Theodor Rocholl, "Circassian in Konya," *Bilder von der Anatolischen Bahn*. DBHI Privatdruck c. 1909.

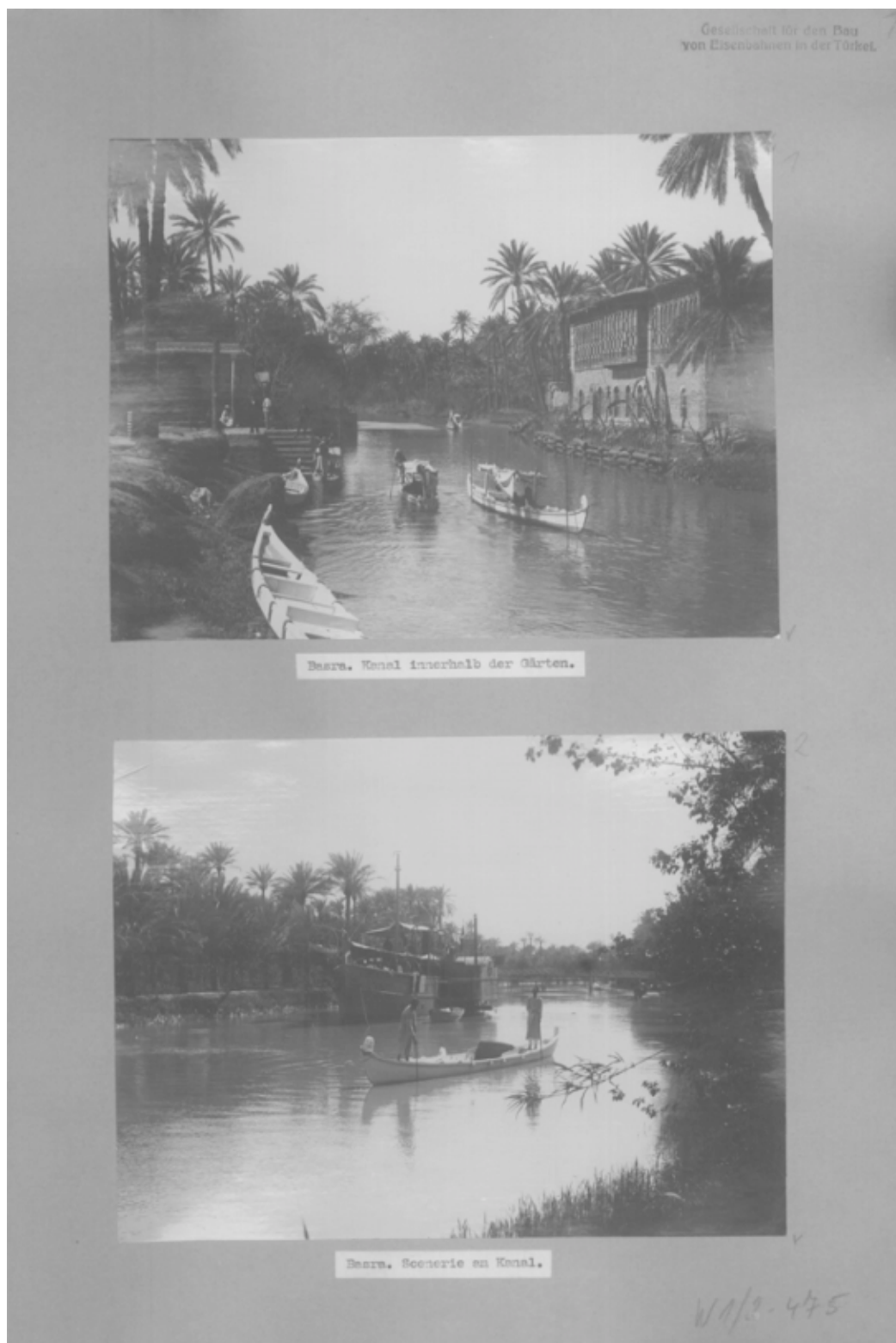


Fig. 2.111. Philipp Holzmann GmbH, views of Basra, c. 1915. ISg W 1/2 475.

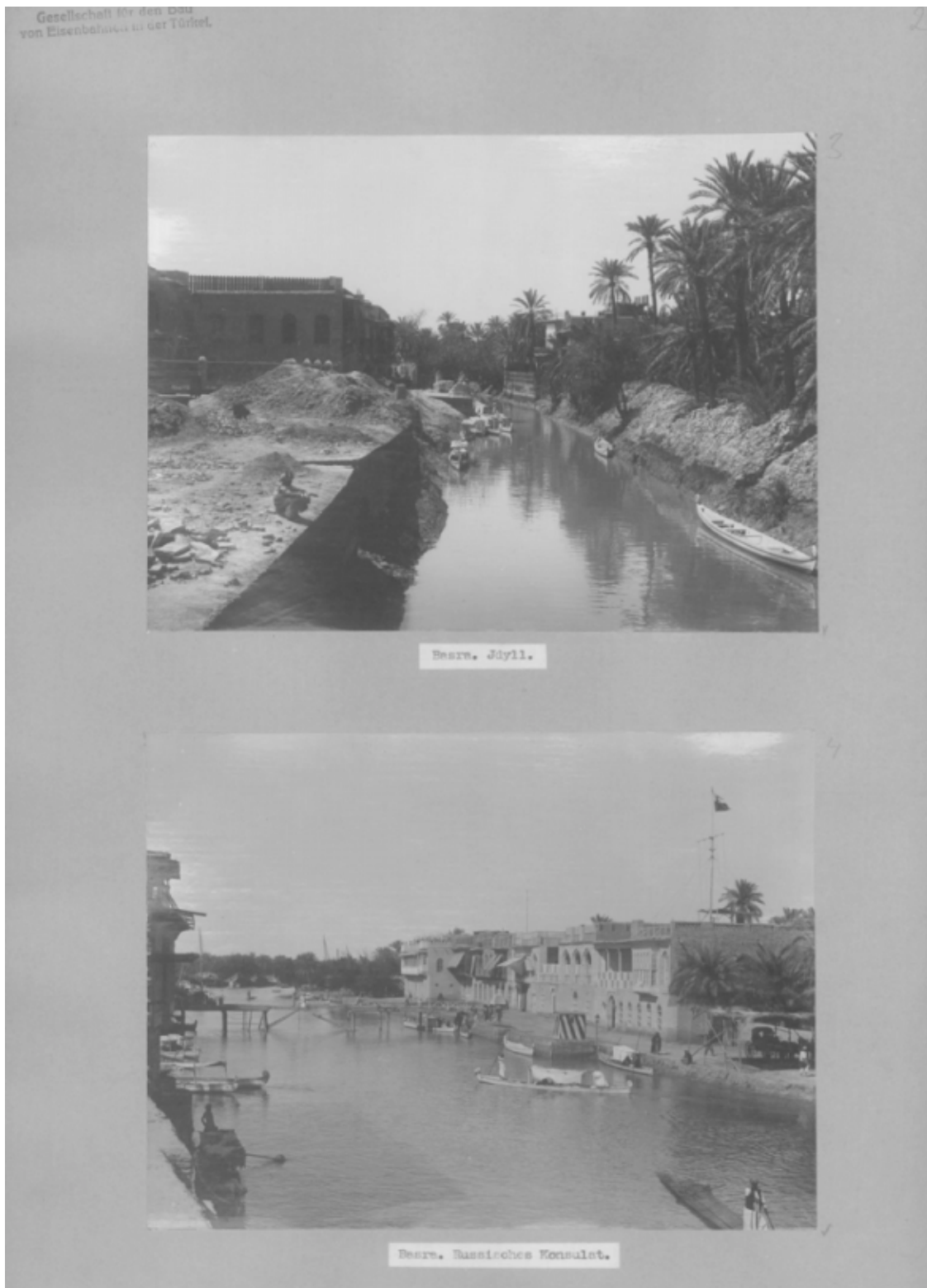


Fig. 2.112. Philipp Holzmann GmbH, views of Baghdad and Basra, c. 1915. ISg W 1/2 475.

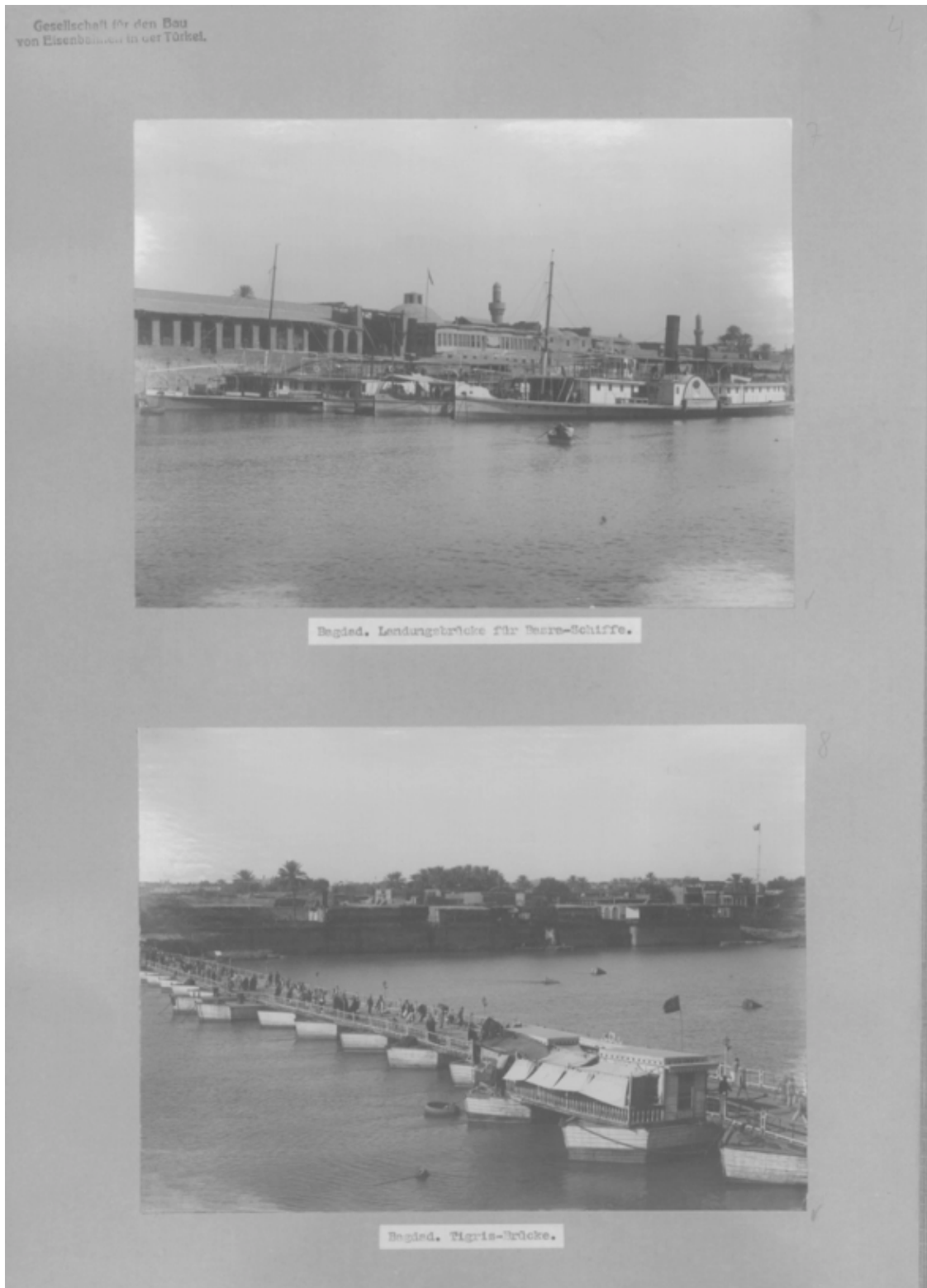
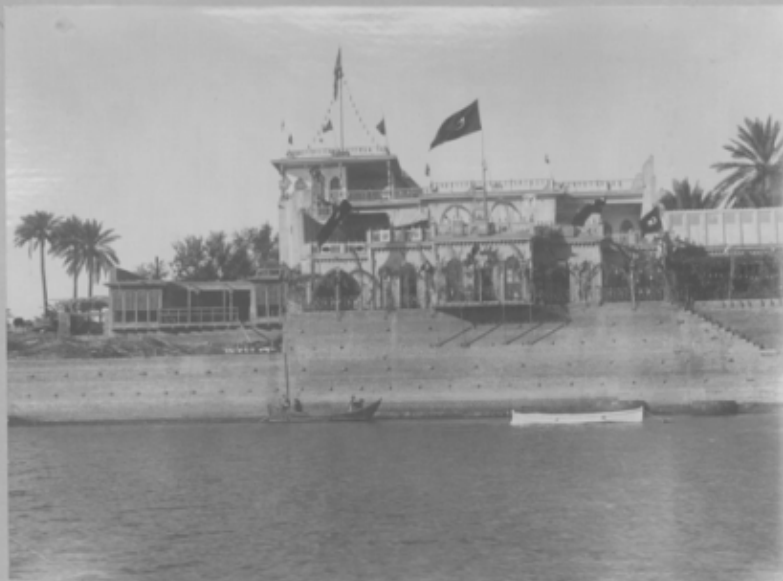


Fig. 2.113. Philipp Holzmann GmbH, views of Baghdad, c. 1915. ISg W 1/2 475.



Bagdad. Beduinfrauen bringen Joghurt (leberenswerte Milch).



Bagdad. Rechtes Ufer. Palais Kasim-Pascha (jetzt Büro der Bagdad-
bahn).

Fig. 2.114. Philipp Holzmann GmbH, views of Baghdad, c. 1915. ISg W 1/2 475.

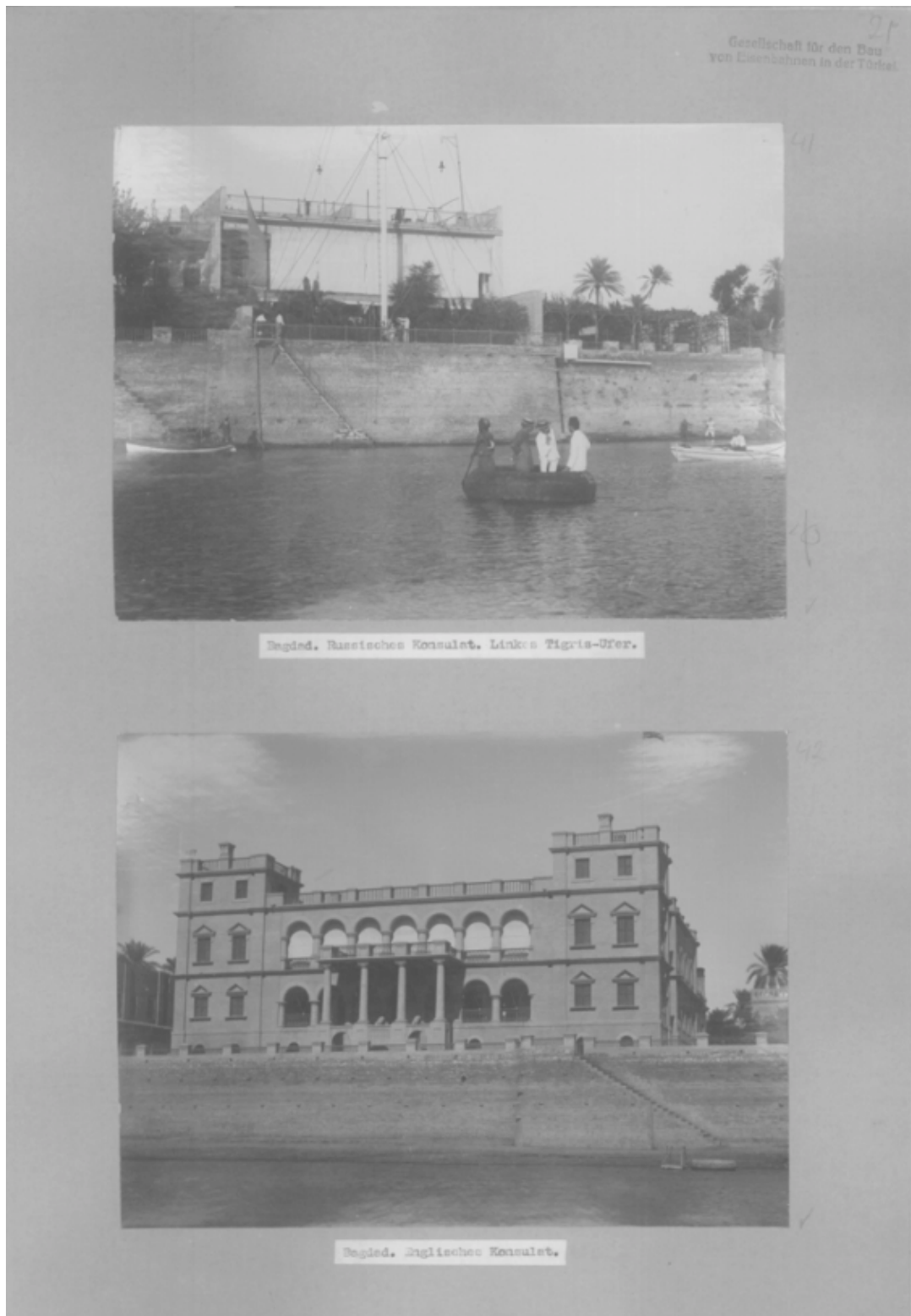


Fig. 2.115. Philipp Holzmann GmbH, view of the Russian (above) and British (below) consulates in Baghdad, c. 1915. ISg W 1/2 475.

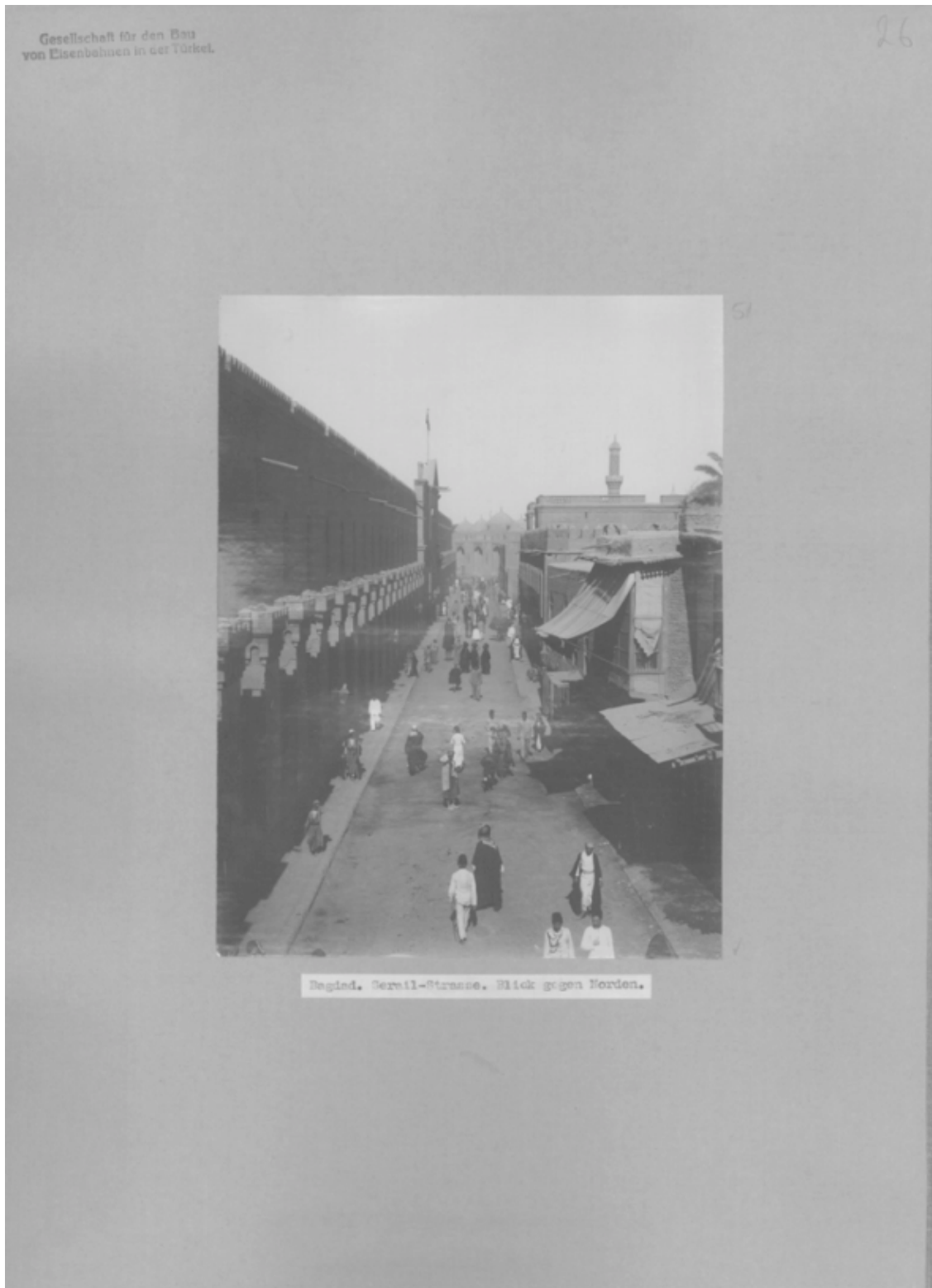


Fig. 2.116. Philipp Holzmann GmbH, view of Baghdad, c. 1915. ISg W 1/2 475.



Fig. 2.117. Philipp Holzmann GmbH, views of Arab men and women, c. 1915. ISg W 1/2 475.



Fig. 2.118. Philipp Holzmann GmbH, views of worker camps in the Belededik region, c. 1915.
ISg W 1/2 475.

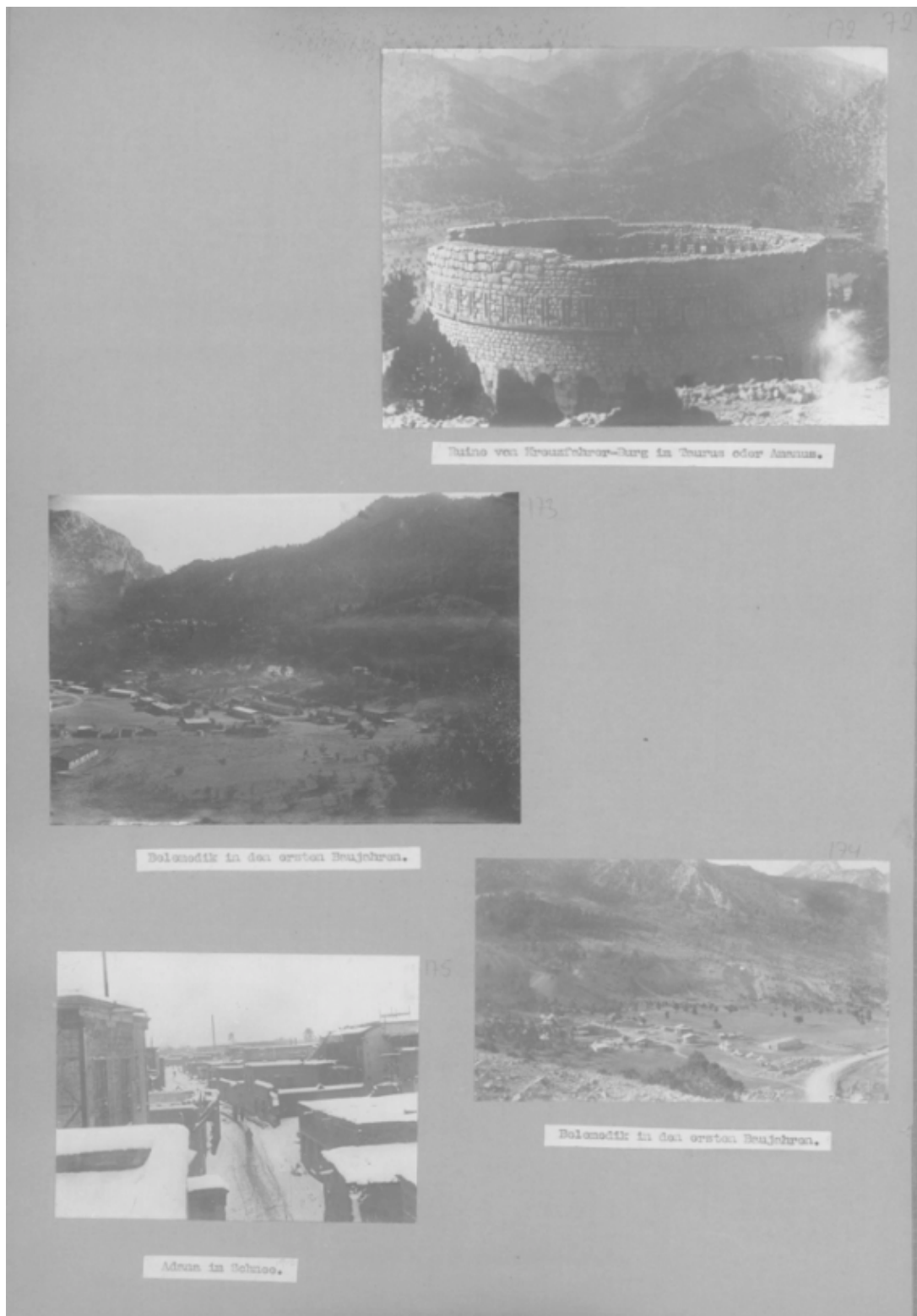


Fig. 2.119. Philipp Holzmann GmbH, various views of the Taurus and Adana regions, c. 1915. ISg W 1/2 475.

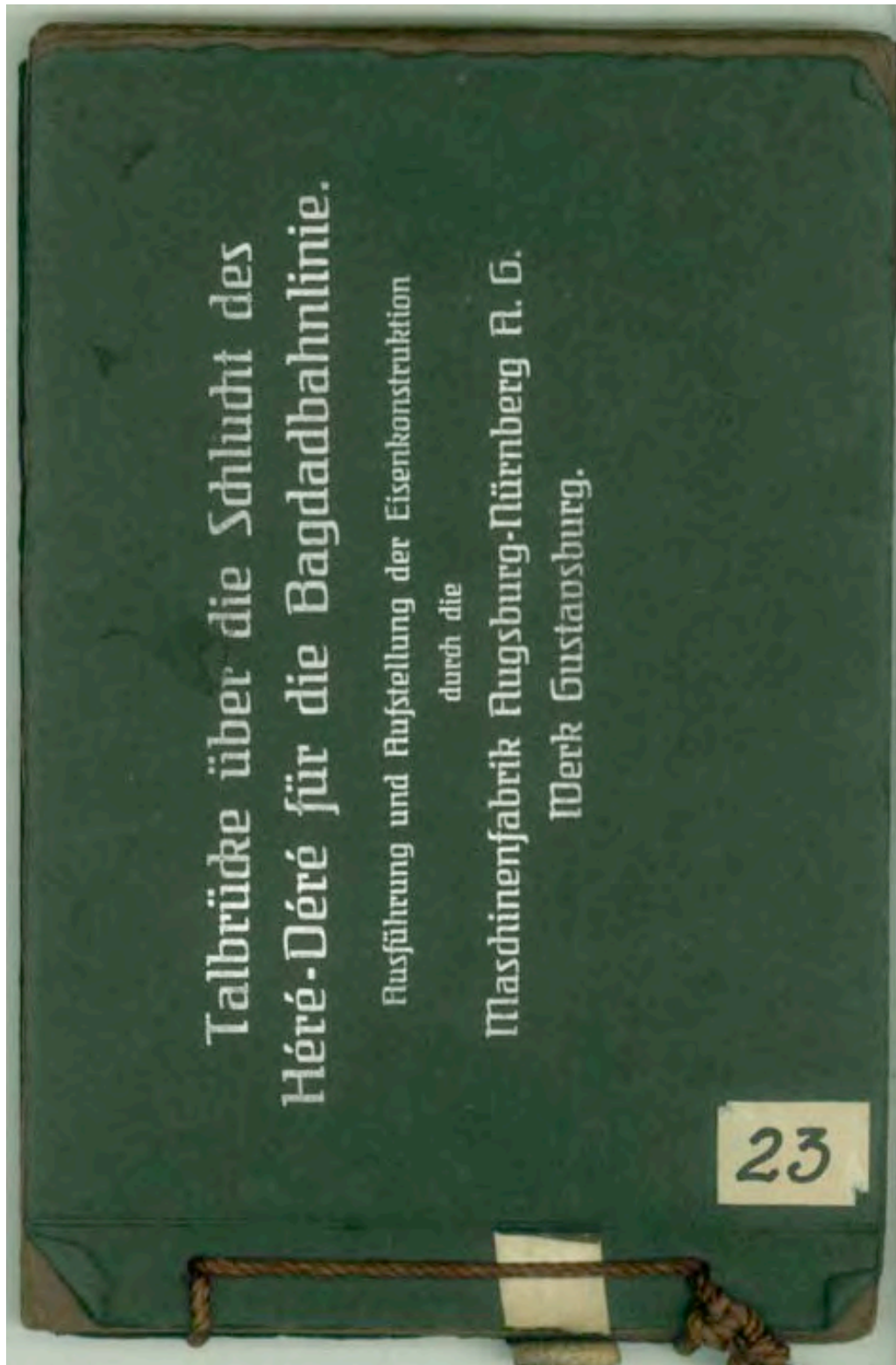


Fig. 2.120. Philipp Holzmann GmbH, cover of photo album “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.



Fig. 2.121. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1914. ISg W 1/2 463.

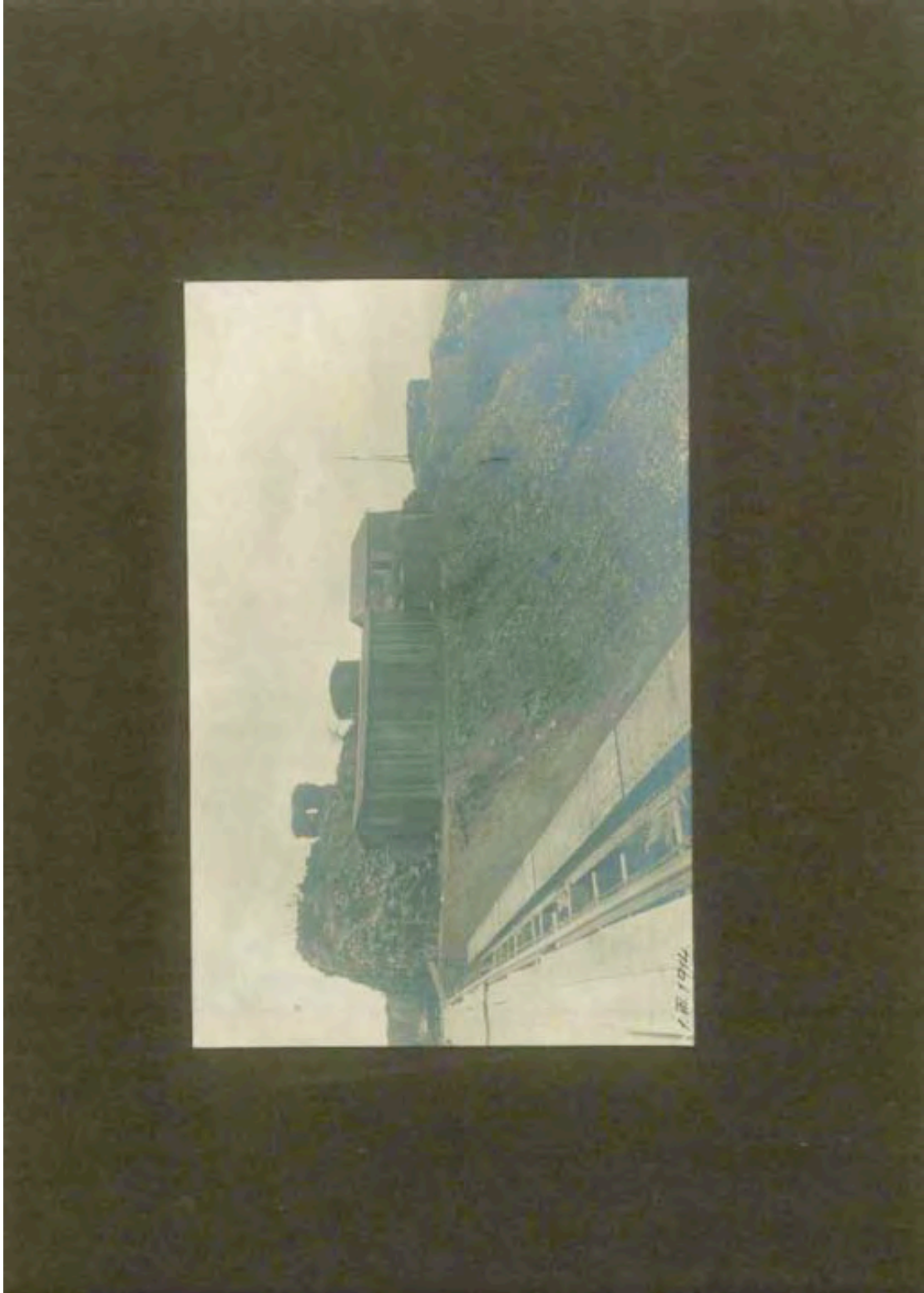


Fig. 2.122. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1914. ISg W 1/2 463.

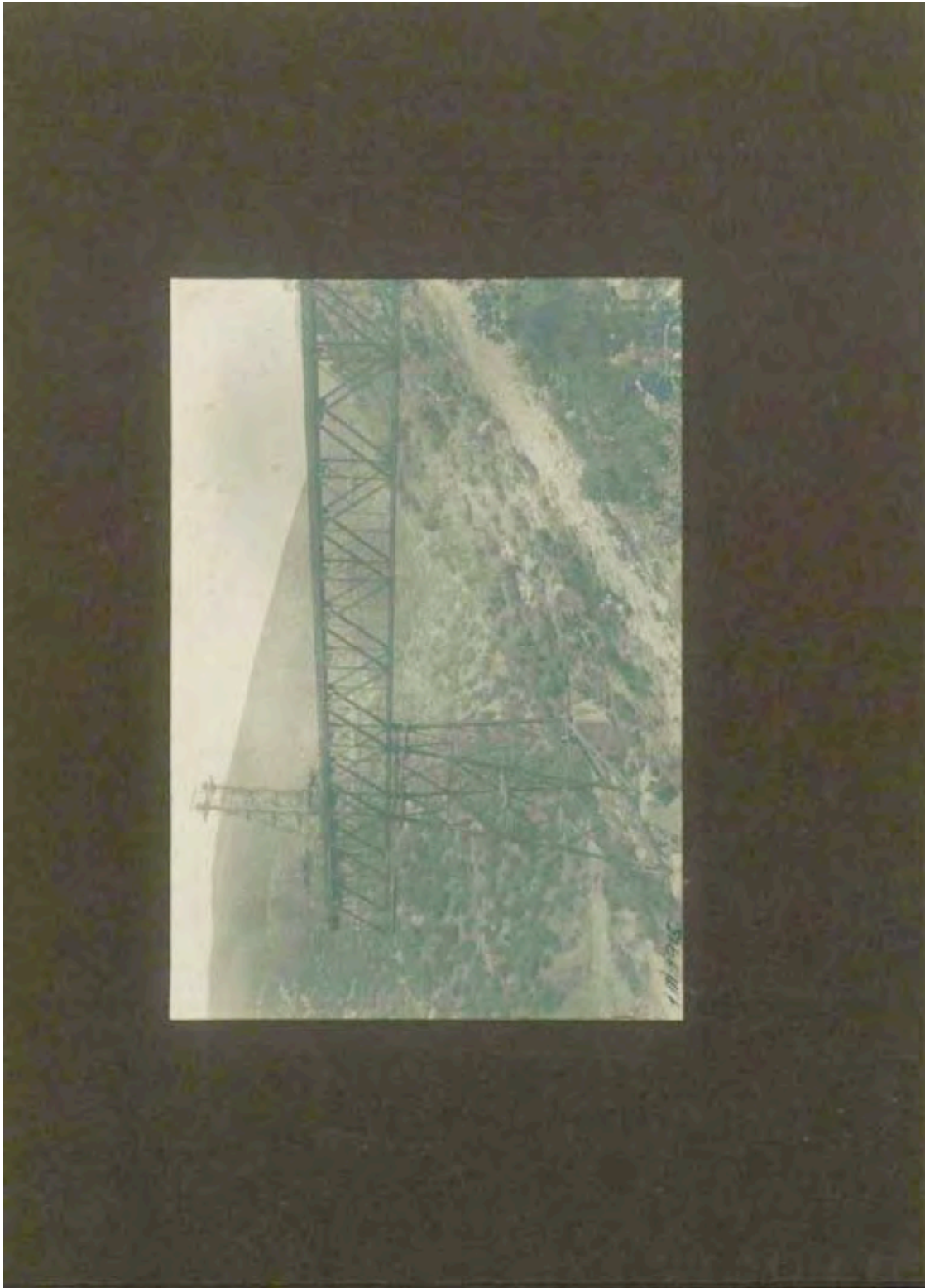


Fig. 2.123. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.



Fig. 2.124. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.



Fig. 2.125. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.



Fig. 2.126. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.



Fig. 2.127. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.

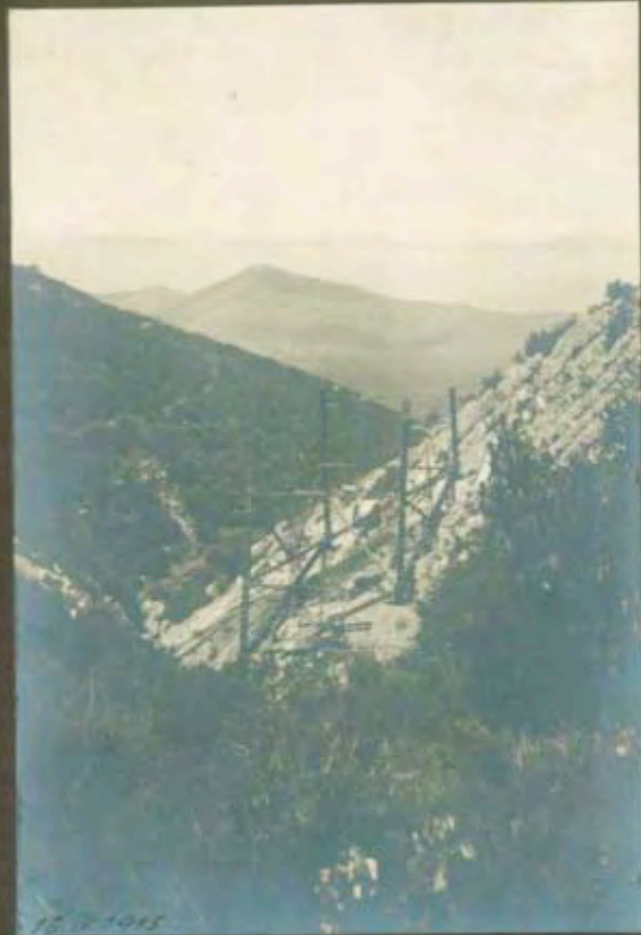


Fig. 2.128. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.



Fig. 2.129. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.



Fig. 2.130. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.

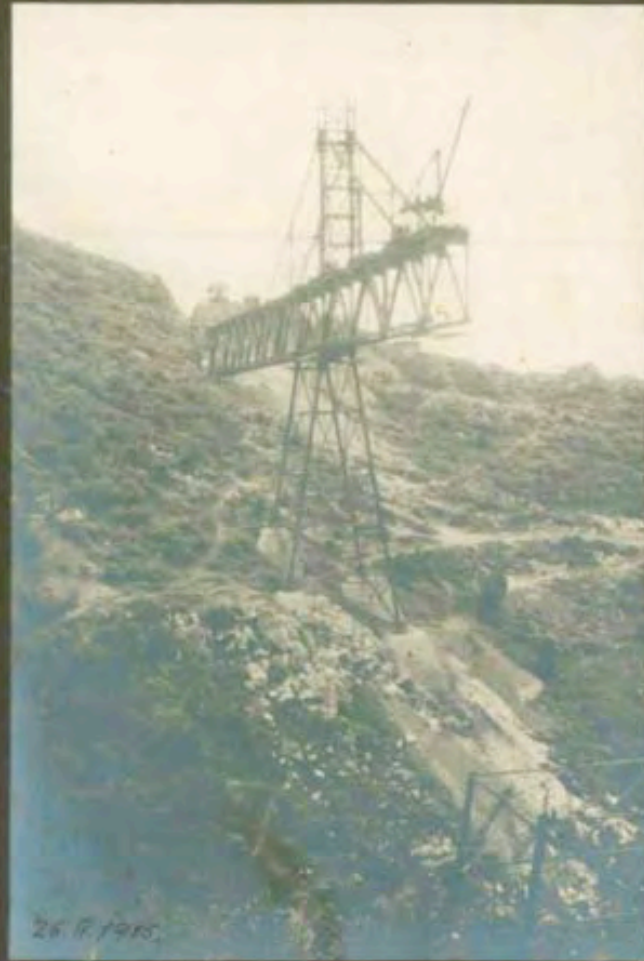


Fig. 2.131. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.



Fig. 2.132. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.



Fig. 2.133. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.



Fig. 2.134. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.

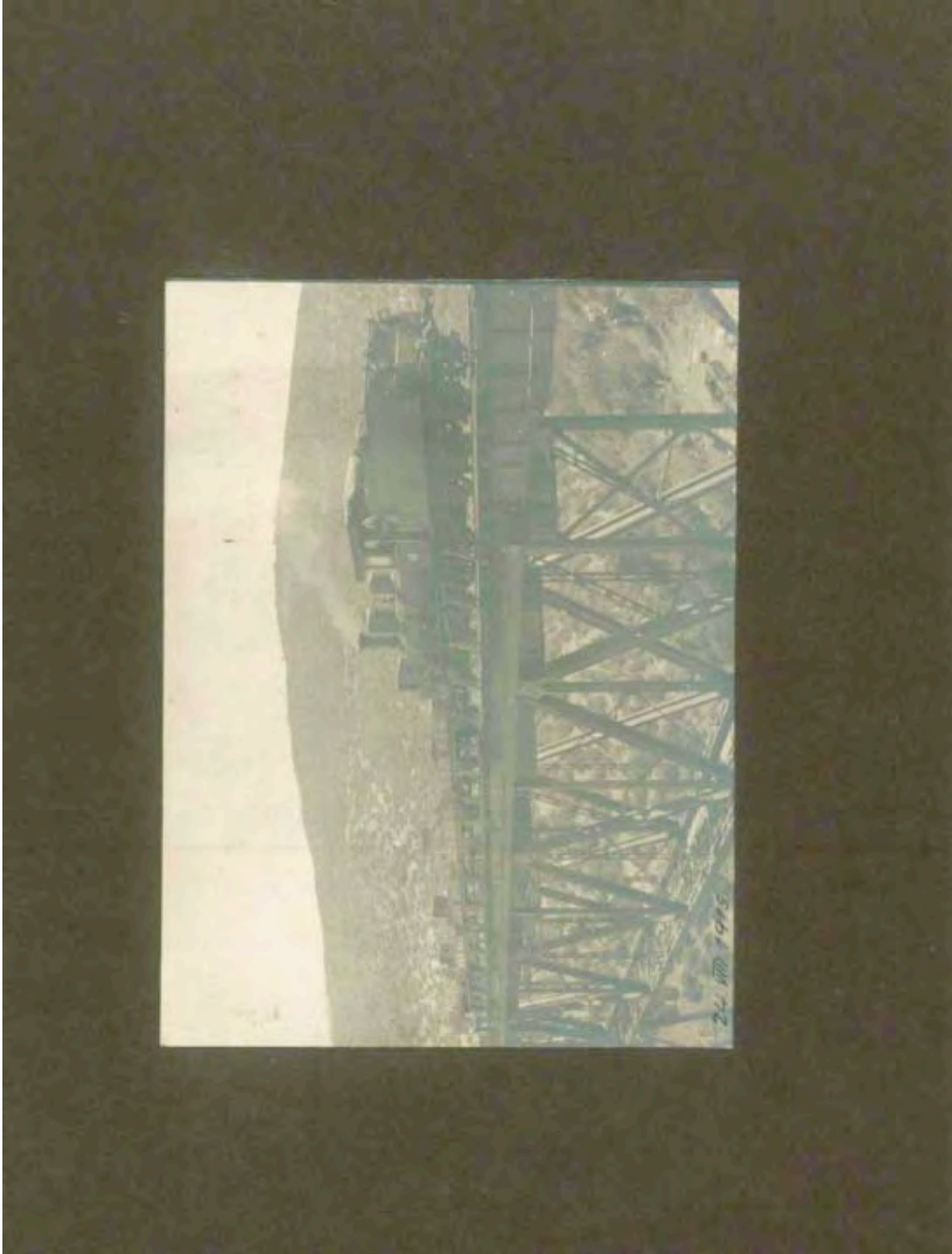


Fig. 2.135. Philipp Holzmann GmbH, plate from Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg, 1915. ISg W 1/2 463.



Fig. 2.136. Philipp Holzmann GmbH, plate from “Talbrücke über die Schlucht des Héré-Déré für die Bagdadbahnlinie, Ausführung und Aufstellung der Eisenkonstruktion durch die Maschinenfabrik Augsburg-Nürnberg A.G. Werk Gustavsburg,” 1915. ISg W 1/2 463.



Fig. 2.137. Karl Staudinger, wartime photos of the Ottoman railways collected by the German War Office, 1915-16. BKa Bildsammlung Staudinger 13152-13154.

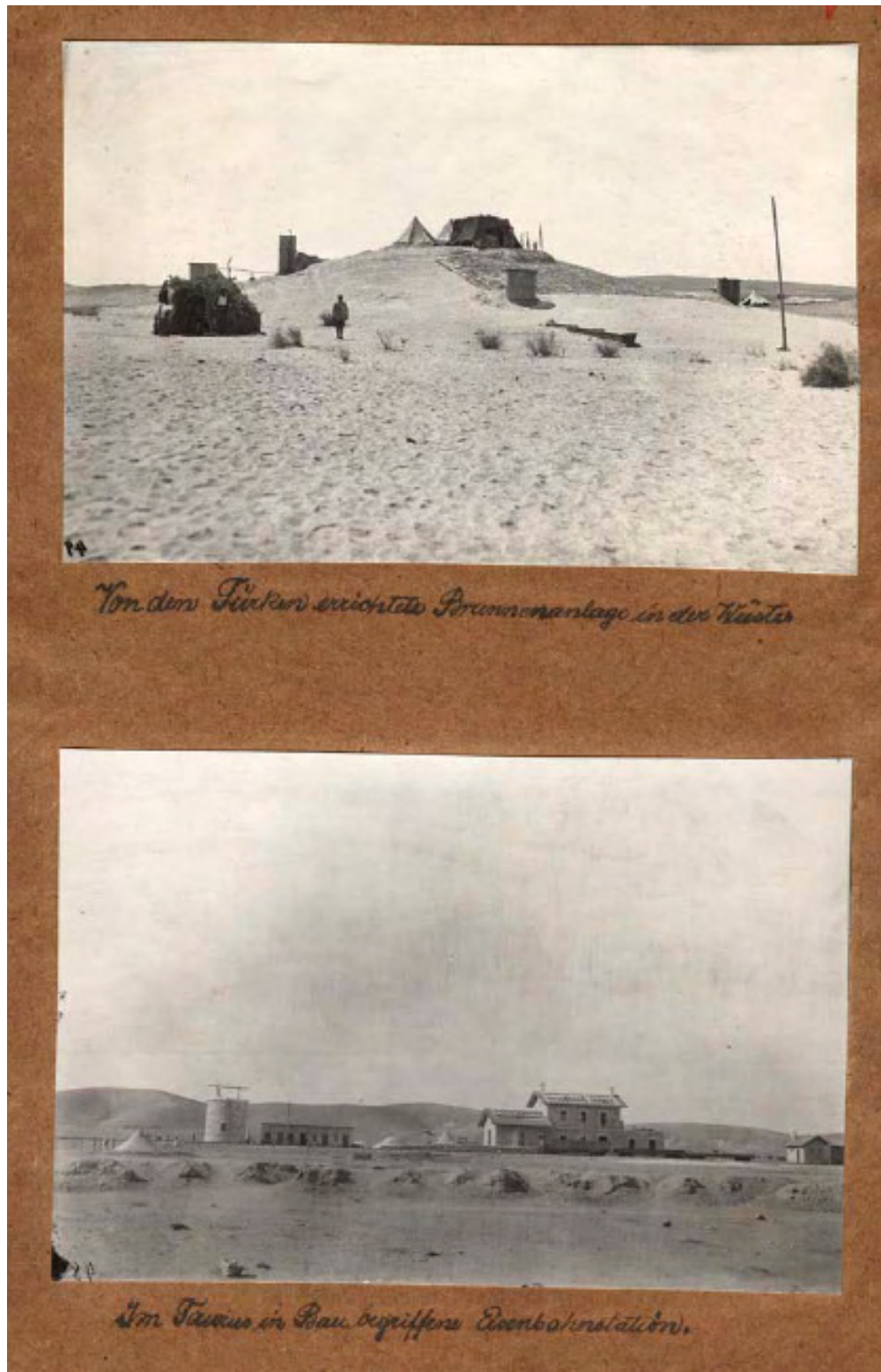


Fig. 2.138. Karl Staudinger, wartime photos of the Ottoman railways collected by the German War Office, 1915-16. BKa Bildsammlung Staudinger 13327-13328.



13

Das Kaiserin Augusteodikt auf dem Veltberg bei Constantin.



Das deutsche Hospital auf dem Veltberg bei Constantin.

Fig. 2.139. Karl Staudinger, wartime photos of the Ottoman railways collected by the German War Office, 1915-16. BKa Bildsammlung Staudinger 13349-13350.



Fig. 2.140. Karl Staudinger, wartime photos of the Ottoman railways collected by the German War Office, 1915-16. BKa Bildsammlung Staudinger 13399-13400.

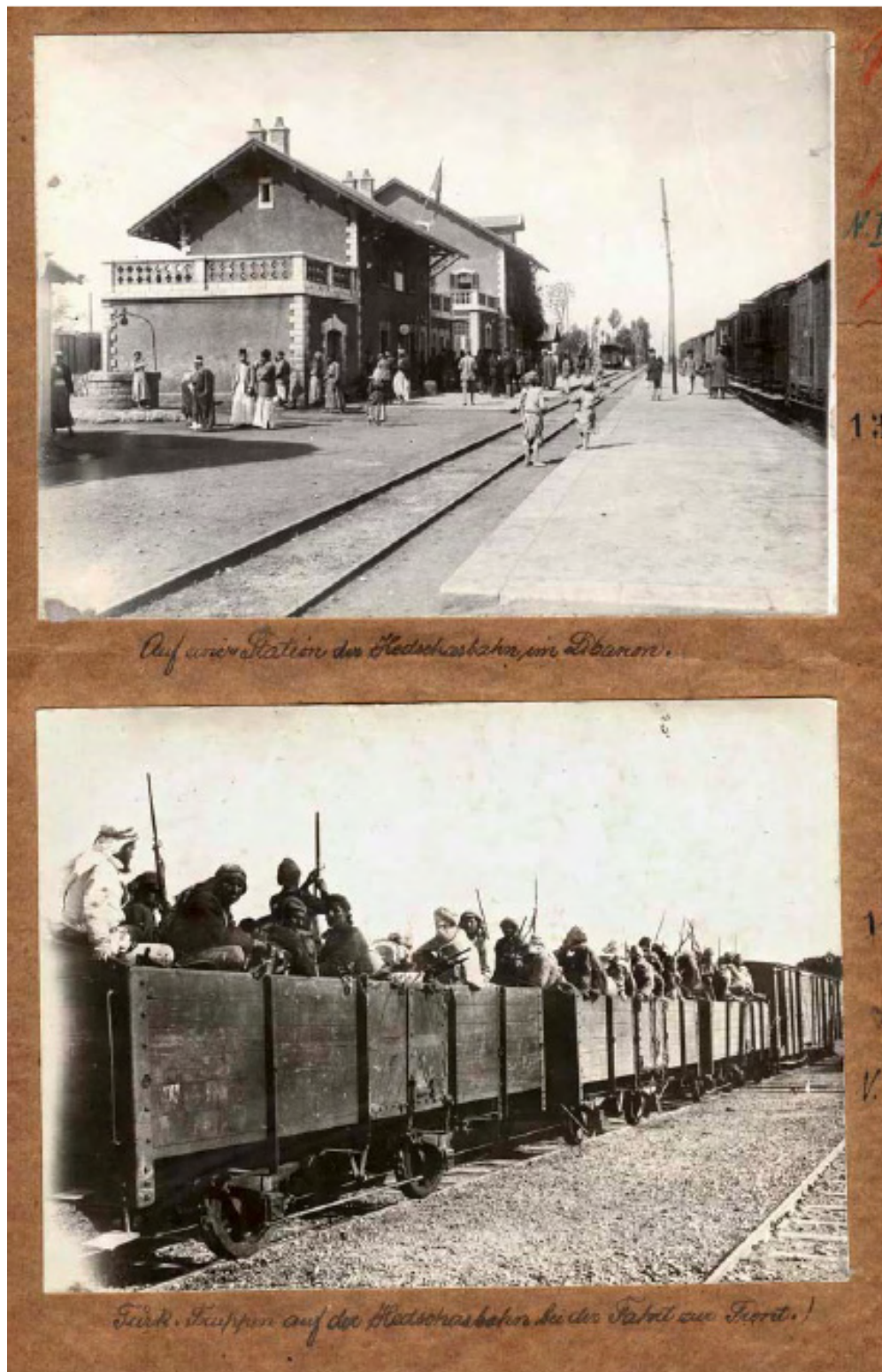


Fig. 2.141. Karl Staudinger, wartime photos of the Ottoman railways collected by the German War Office, 1915-16. BKa Bildsammlung Staudinger 13417-13418.



Fig. 2.142. Unknown, view of tunnel in the Taurus Range, c. 1911-1918. FhsP 0023_002.



Fig. 2.143. Unknown, view of culvert in the Taurus Range, c. 1911-1918. FhsP 0023_004.

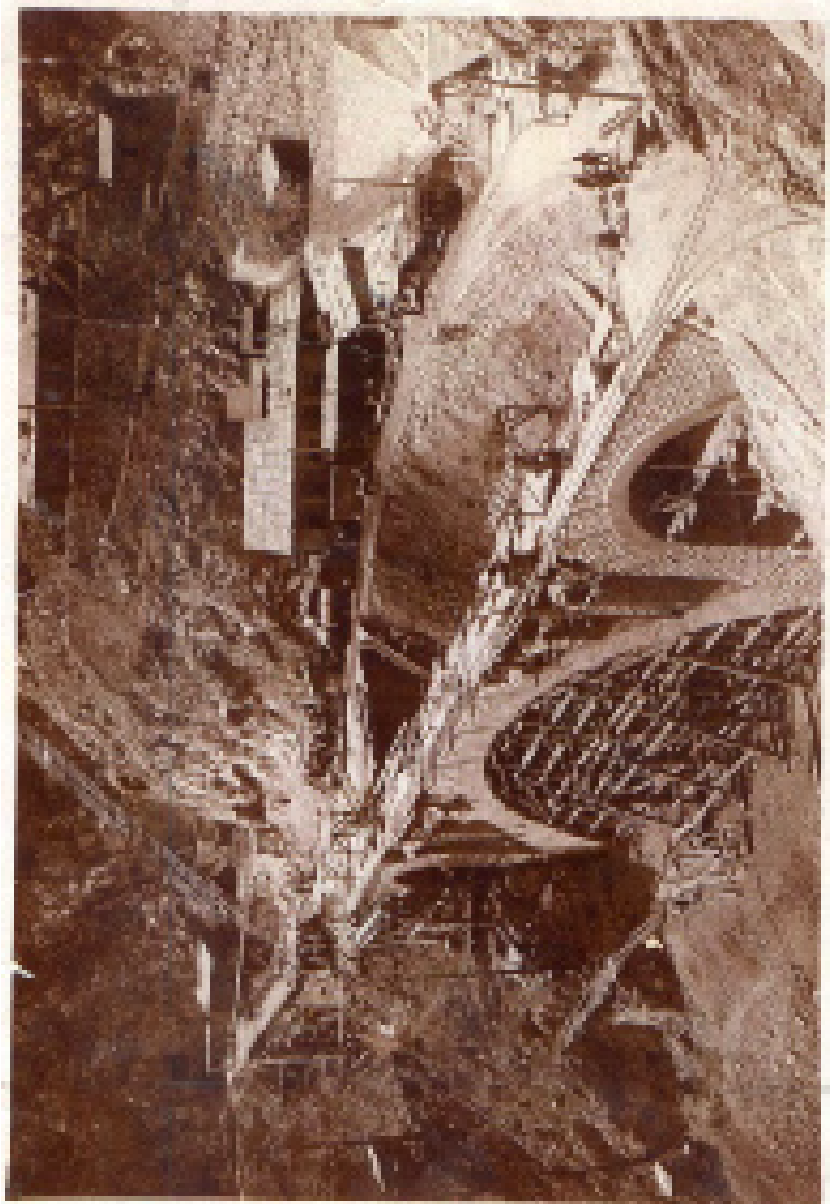


Fig. 2.144. Unknown, view of bridge constructions in the Taurus Range, c. 1911-1918. FhsP 0023_006.



Fig. 2.145. Unknown, view of Adana Station, c. 1911-1918. FhsP 0023_007.



Fig. 2.146. Unknown, view of tunnel in the Taurus Range, c. 1911-1918. FhsP 0023_008.



Fig. 2.147. Unknown, view of Meißner with German and Turkish workers in the Taurus Range, c. 1911-1918. FhsP 0023_0013.

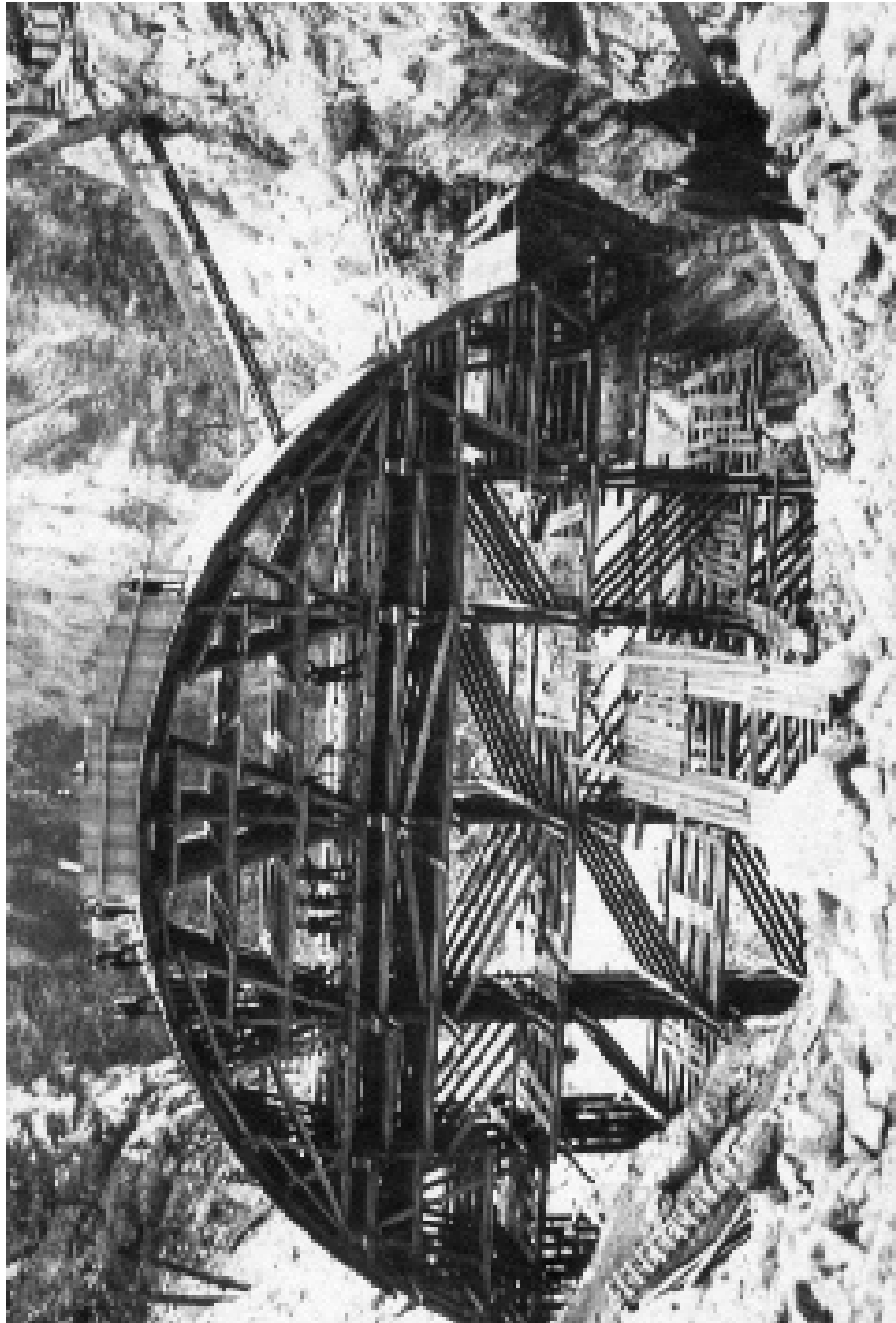


Fig. 2.148. Ochs, view of bridge construction in the Taurus Range, c. 1913-1915. FhsP 18371_06.



Fig. 2.149. Ochs, view of bridge construction in the Taurus Range, c. 1913-1915. FhsP 18371_019.

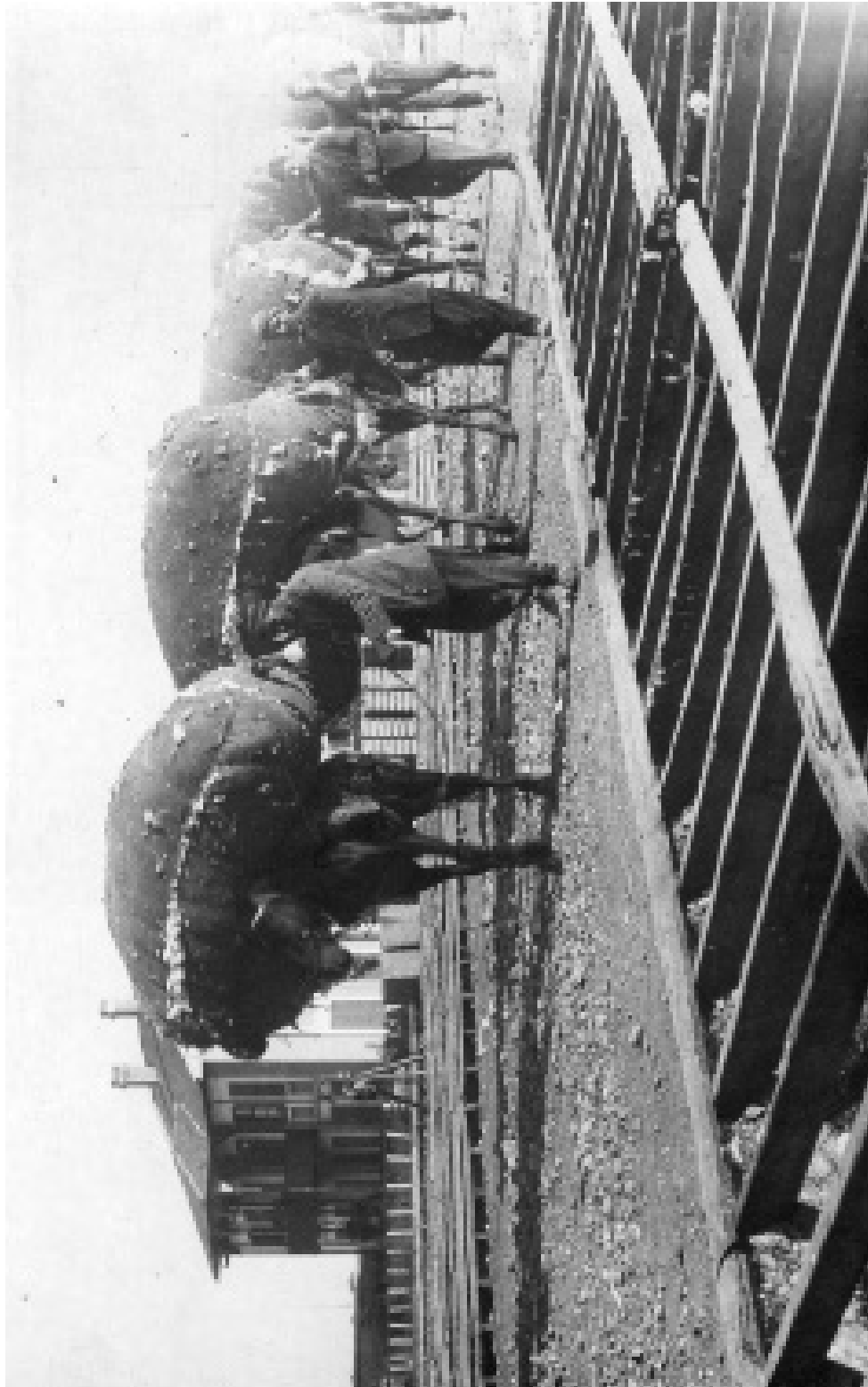


Fig. 2.150. Ochs, view of cotton shipping in Adana, c. 1909-1918. FhsP 18372_61.



Fig. 2.151. Ochs, view of a Taurus Range station, c. 1909-1918. FhsP 18372_62.



Fig. 2.152. Ochs, view of cotton production in Adana, c. 1909-1918. FhsP 18372_63.

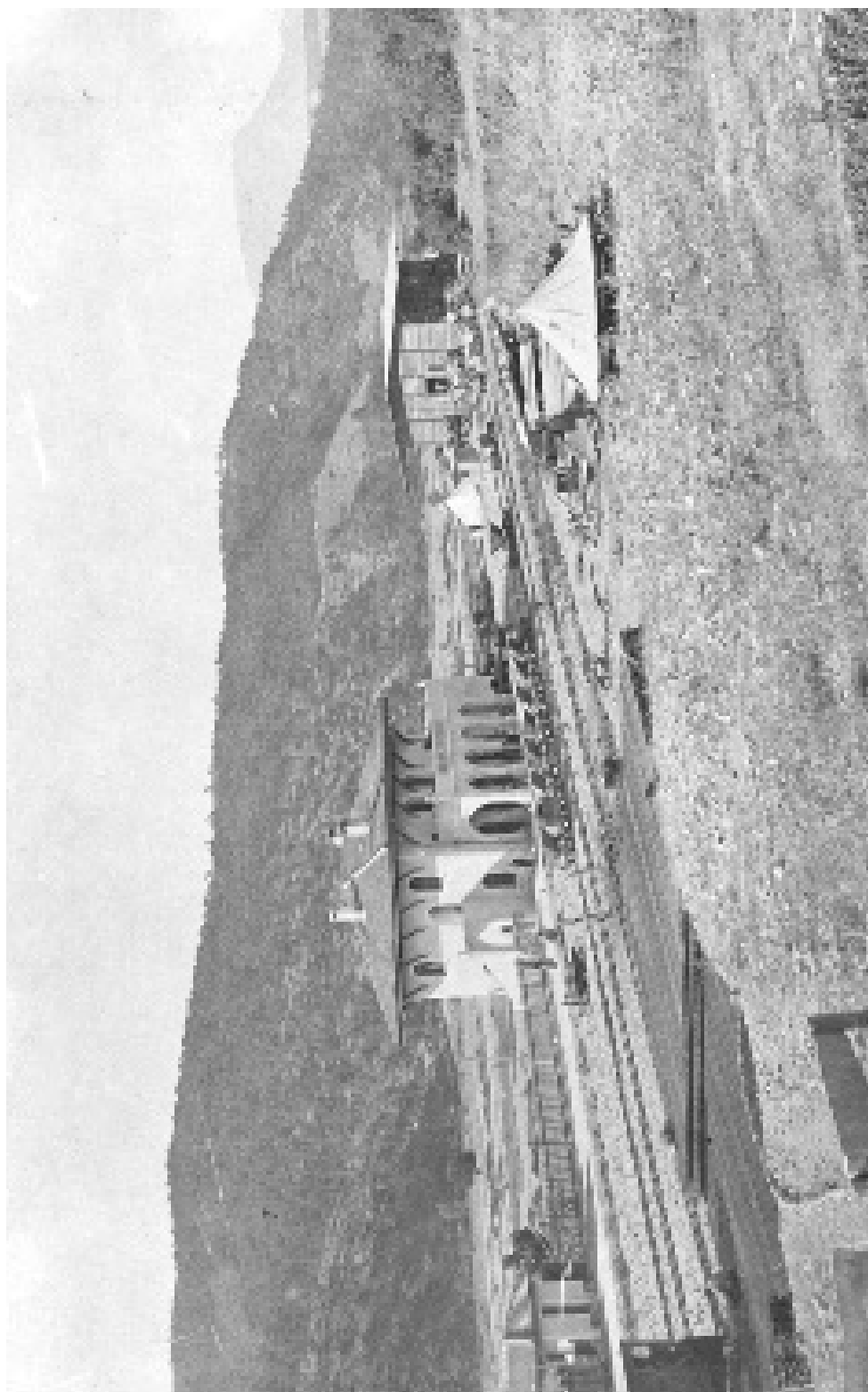


Fig. 2.153. Ochs, view of Bahçe station, c. 1909-1918. FhsP 18372_66.



Fig. 2.154. Ochs, view of the German school in Adana, c. 1909-1918. FhsP 18372_69.



Fig. 2.155. Ochs, view of workers' tent camp near Adana, c. 1909-1918. FhsP 18372_77.



Fig. 2.156. Ochs, view of cotton production in Adana, c. 1909-1918. FhsP 18372_80.



Fig. 2.157. Ochs, view of engineers and their families near Adana, c. 1909-1918. FhsP 18372_81.

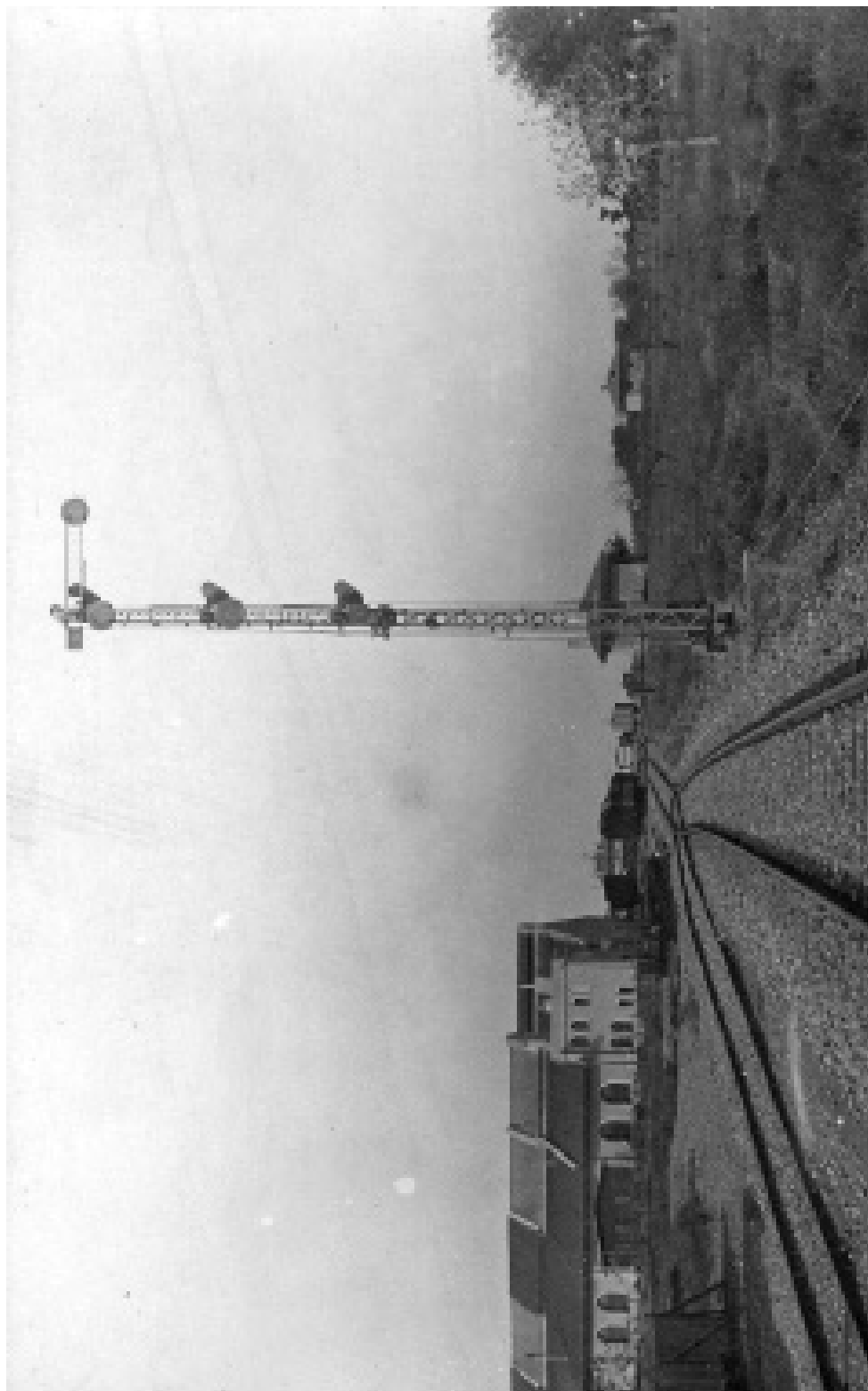


Fig. 2.158. Ochs, view of track at Adana station, c. 1909-1918. FhsP 18372_90.

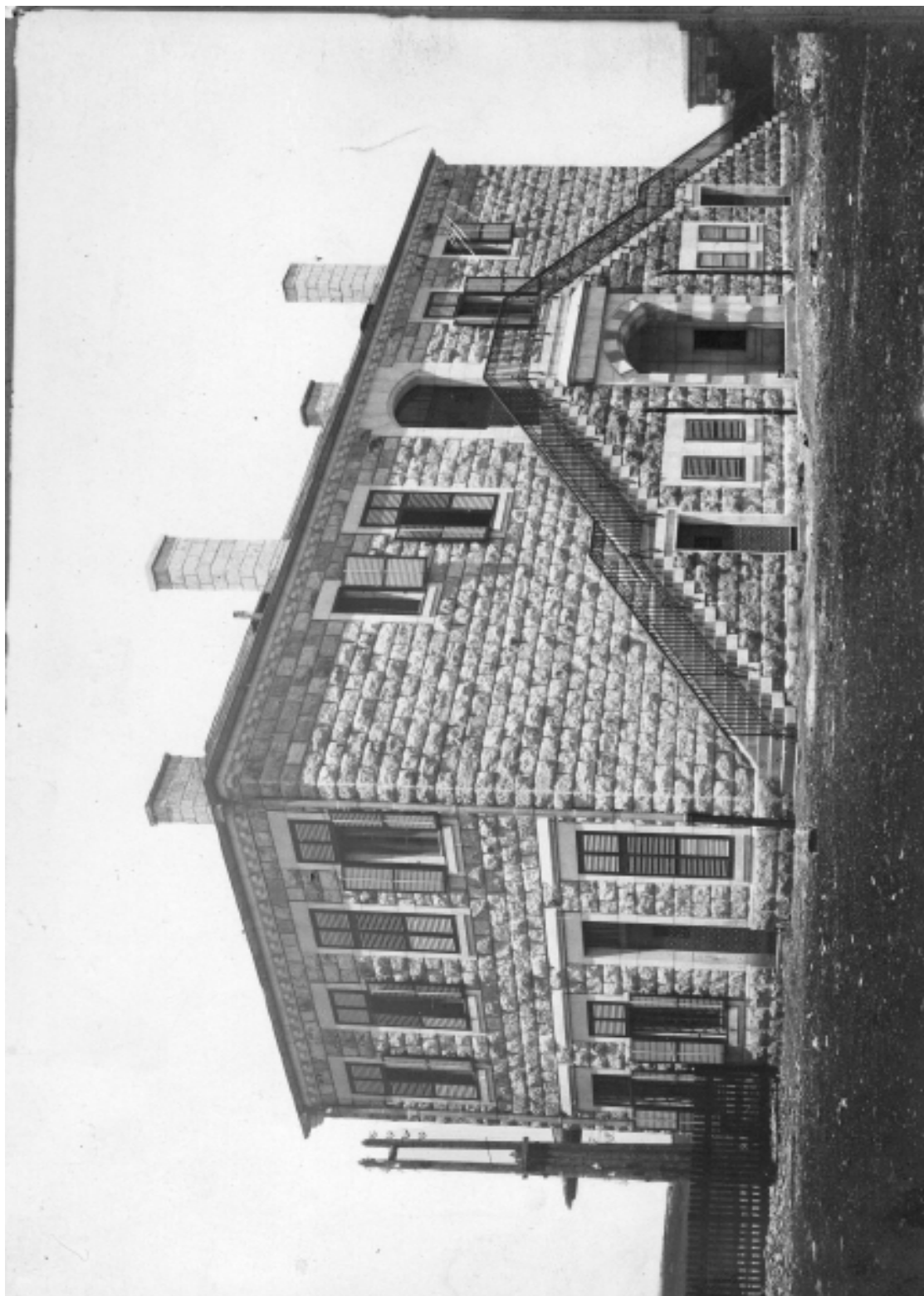


Fig. 2.159. Unknown, view of Jerablus station, c.1915. FhsP b4_1_0.



Fig. 3.1. Louis Haghe, Gate of Damascus, Jerusalem, April 14th 1839. LOC illus. NC1115.R56 1842 (Case Z).

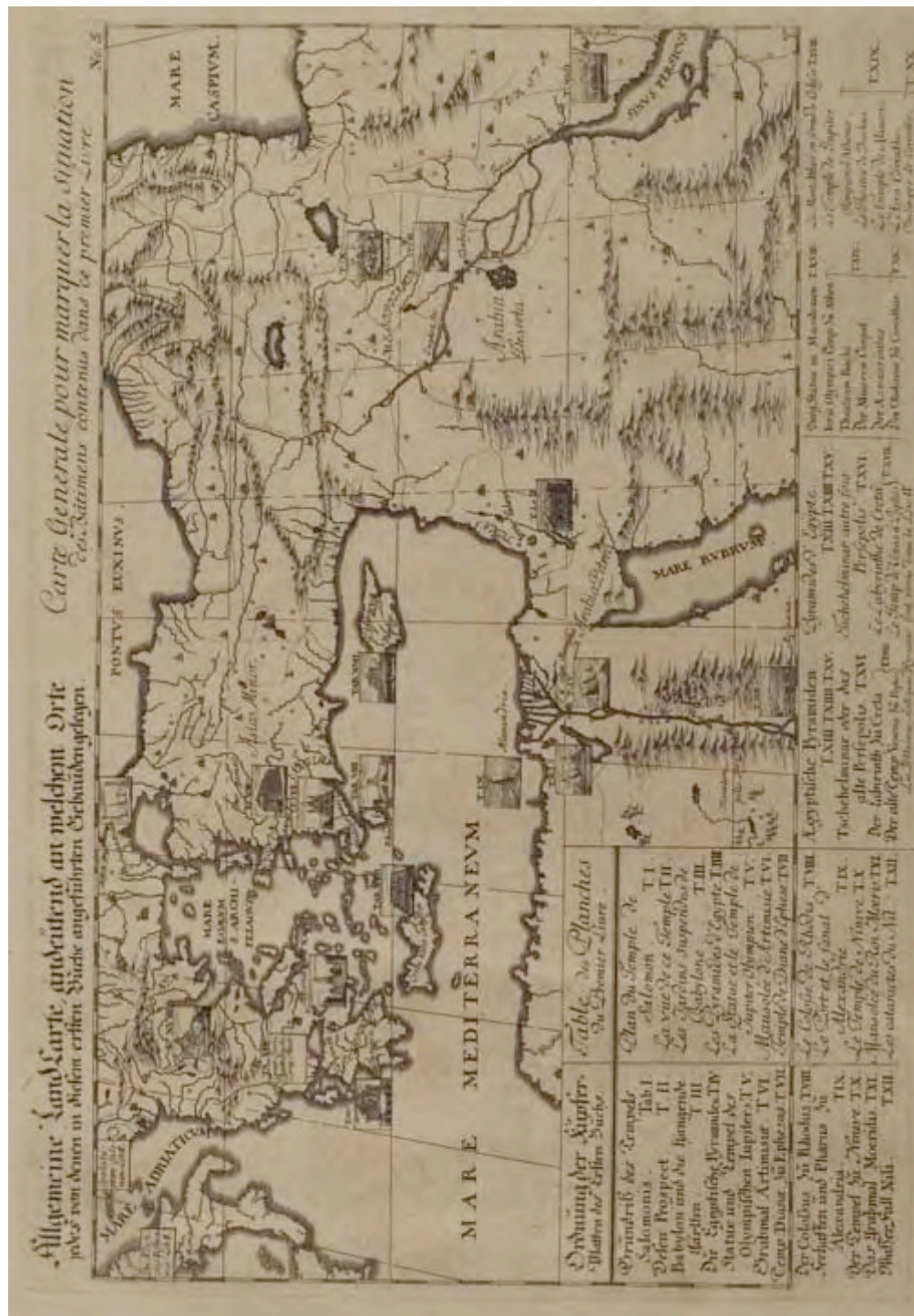


Fig. 3.2. Johann Bernhard Fischer von Erlach, map of illustrated locations around the Mediterranean, *Entwurf Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüßmünzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), No. 5. Universitätsbibliothek Heidelberg.

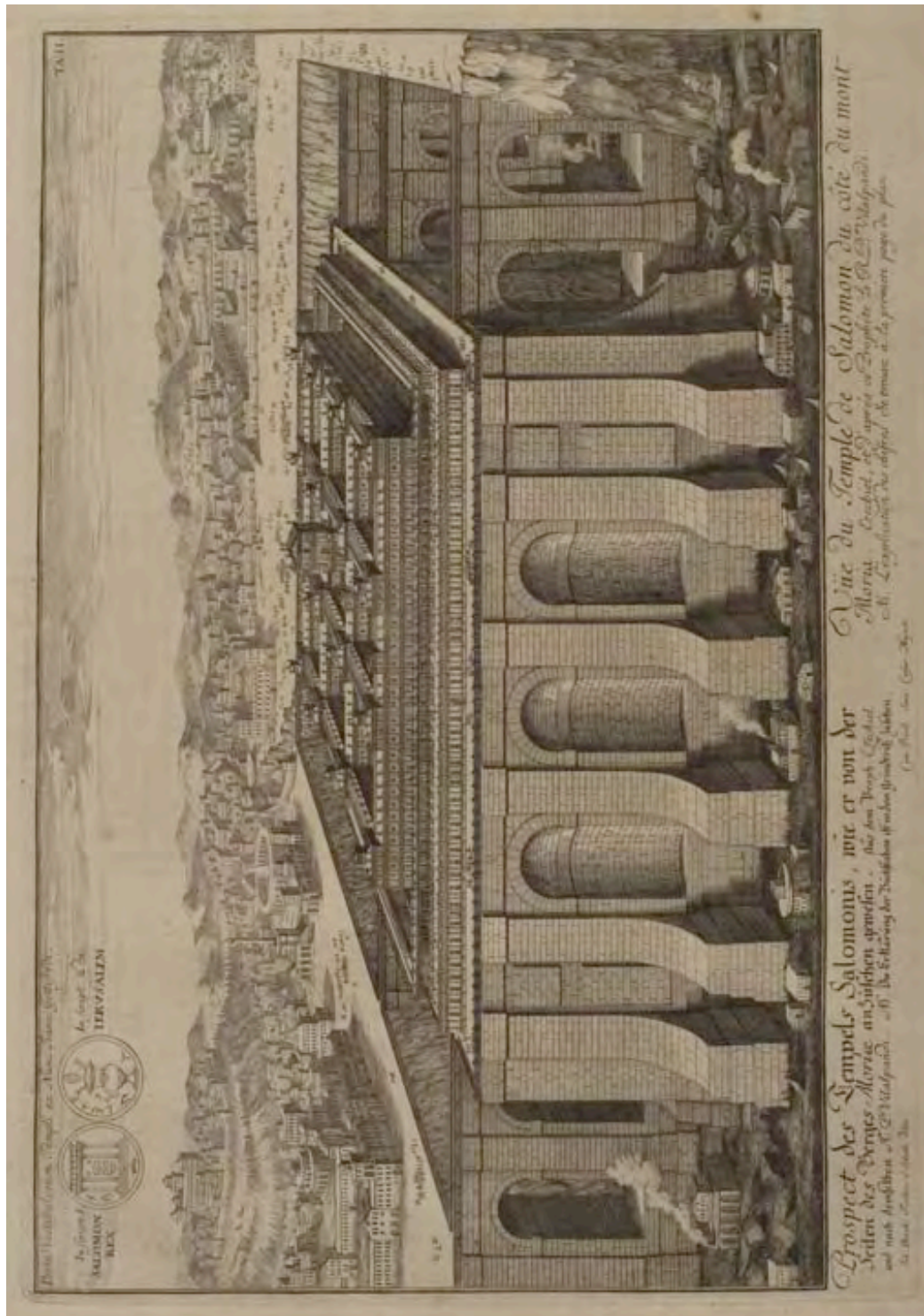


Fig. 3.3. Johann Bernhard Fischer von Erlach, view of Solomon's Temple, *Entwurf Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch I, Tafel II. Universitätsbibliothek Heidelberg.

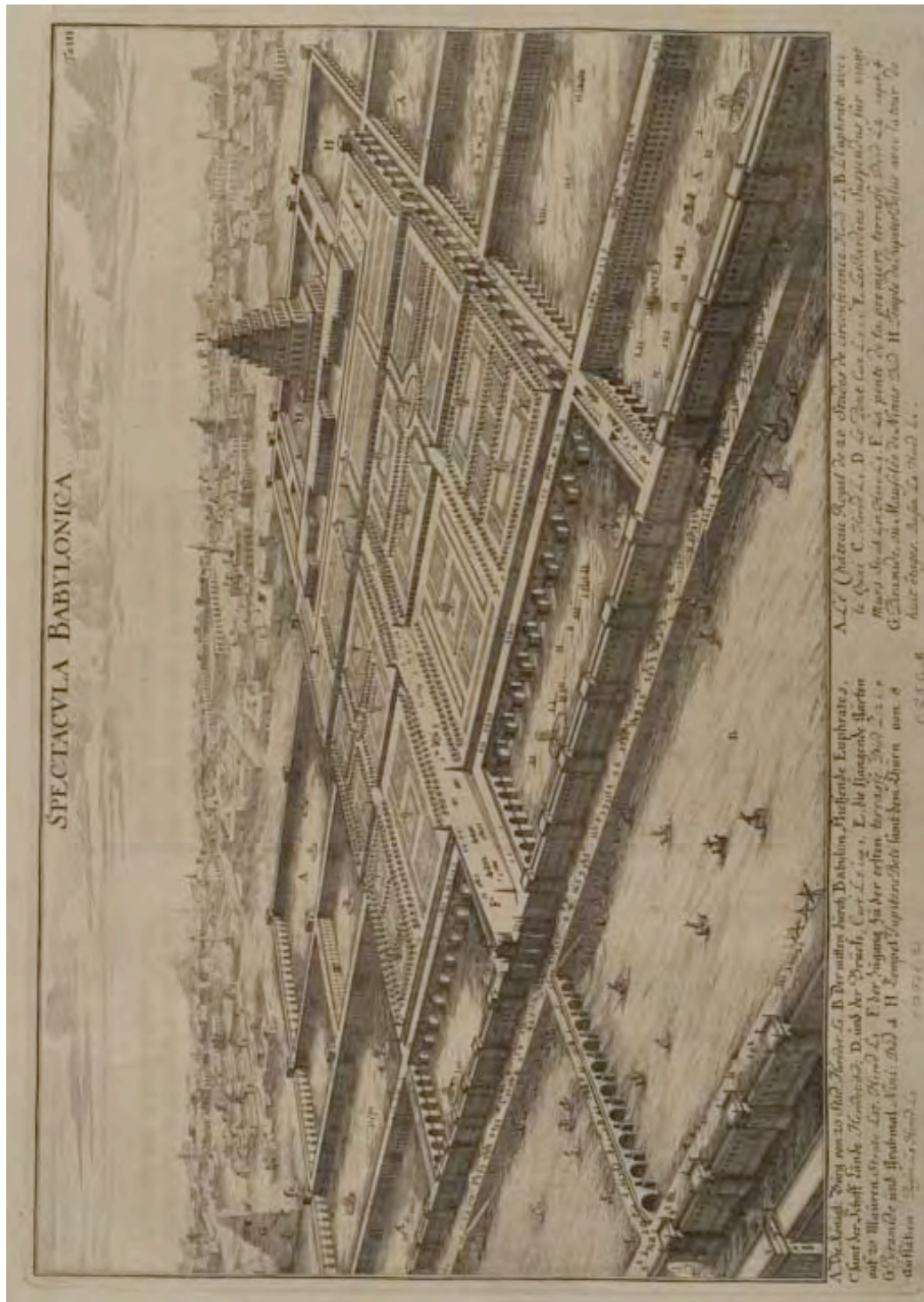


Fig. 3.4. Johann Bernhard Fischer von Erlach, view of Babylon, *Entwurf Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völker; und aus den Geschicht-büchen, Gedächtniß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch I, Tafel III. Universitätsbibliothek Heidelberg.

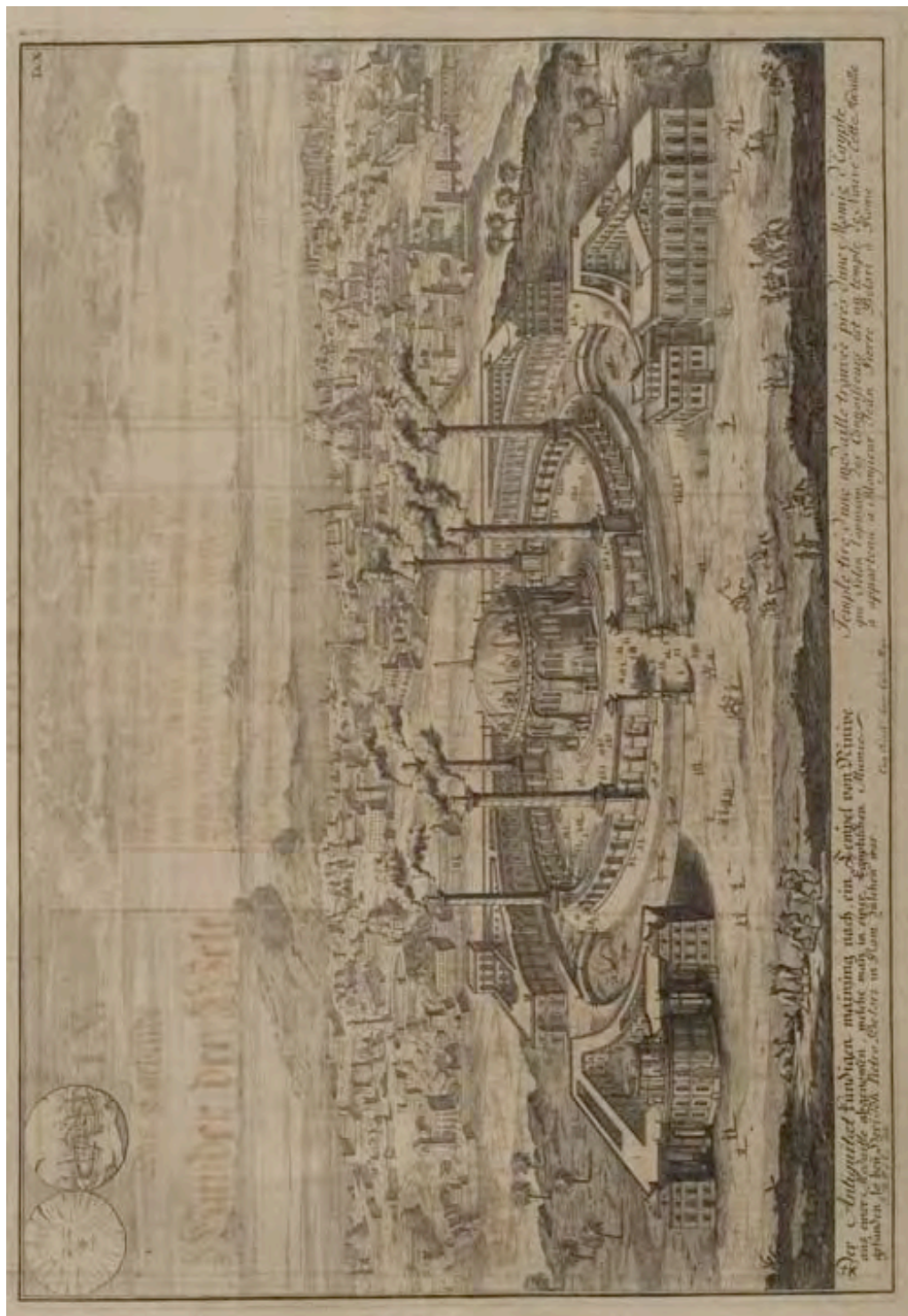


Fig. 3.5. Johann Bernhard Fischer von Erlach, view of Nineveh, *Entwurf Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völker; und aus den Geschicht-büchen, Gedächtniß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch I, Tafel X. Universitätsbibliothek Heidelberg.

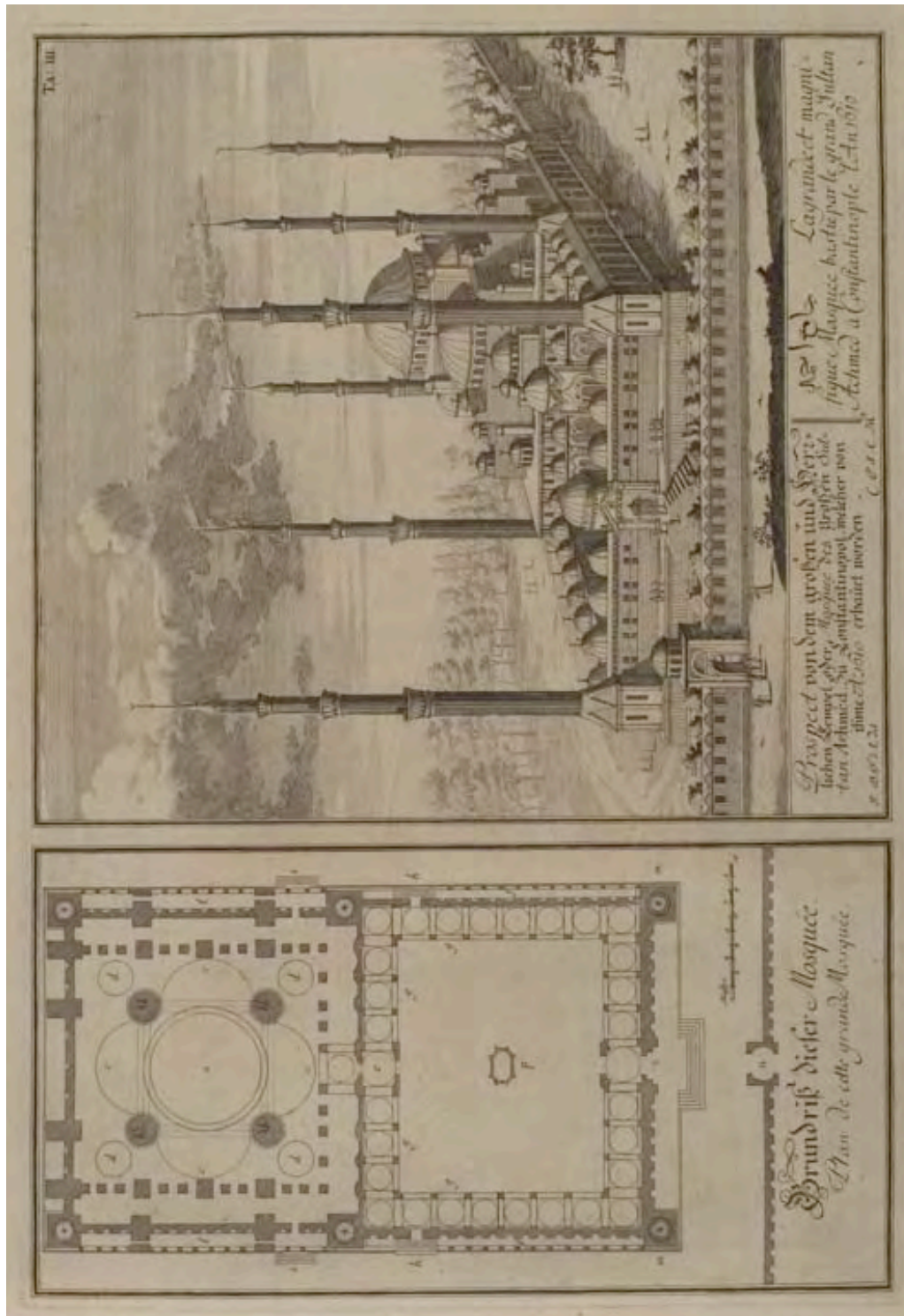


Fig. 3.6. Johann Bernhard Fischer von Erlach, plan and view of the Sultanahmet mosque, İstanbul, *Entwurf Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III, Tafel III. Universitätsbibliothek Heidelberg.

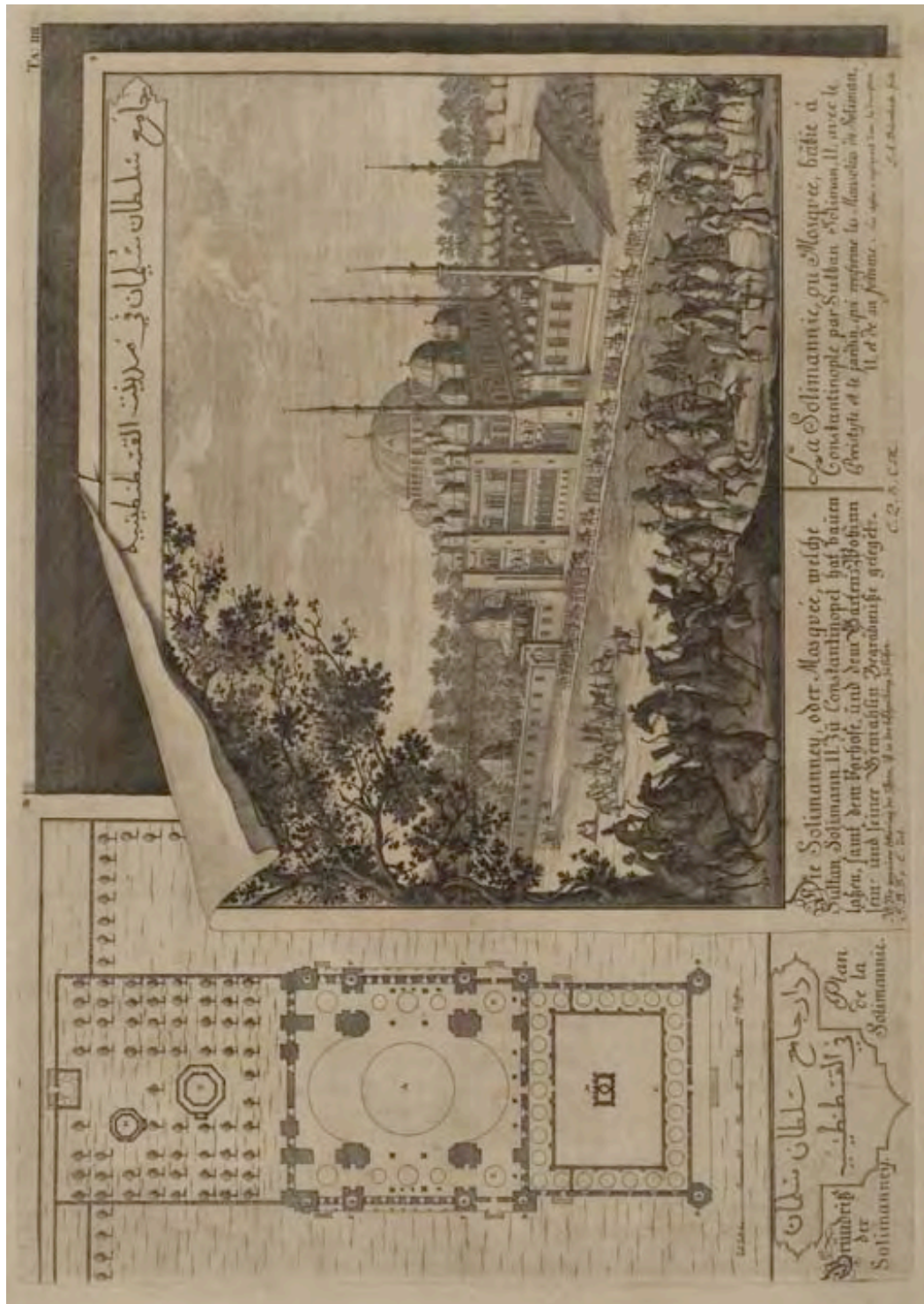


Fig. 3.7. Johann Bernhard Fischer von Erlach, view of the Süleymaniye mosque, *Entwurf Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III Tafel IV (III). Universitätsbibliothek Heidelberg.

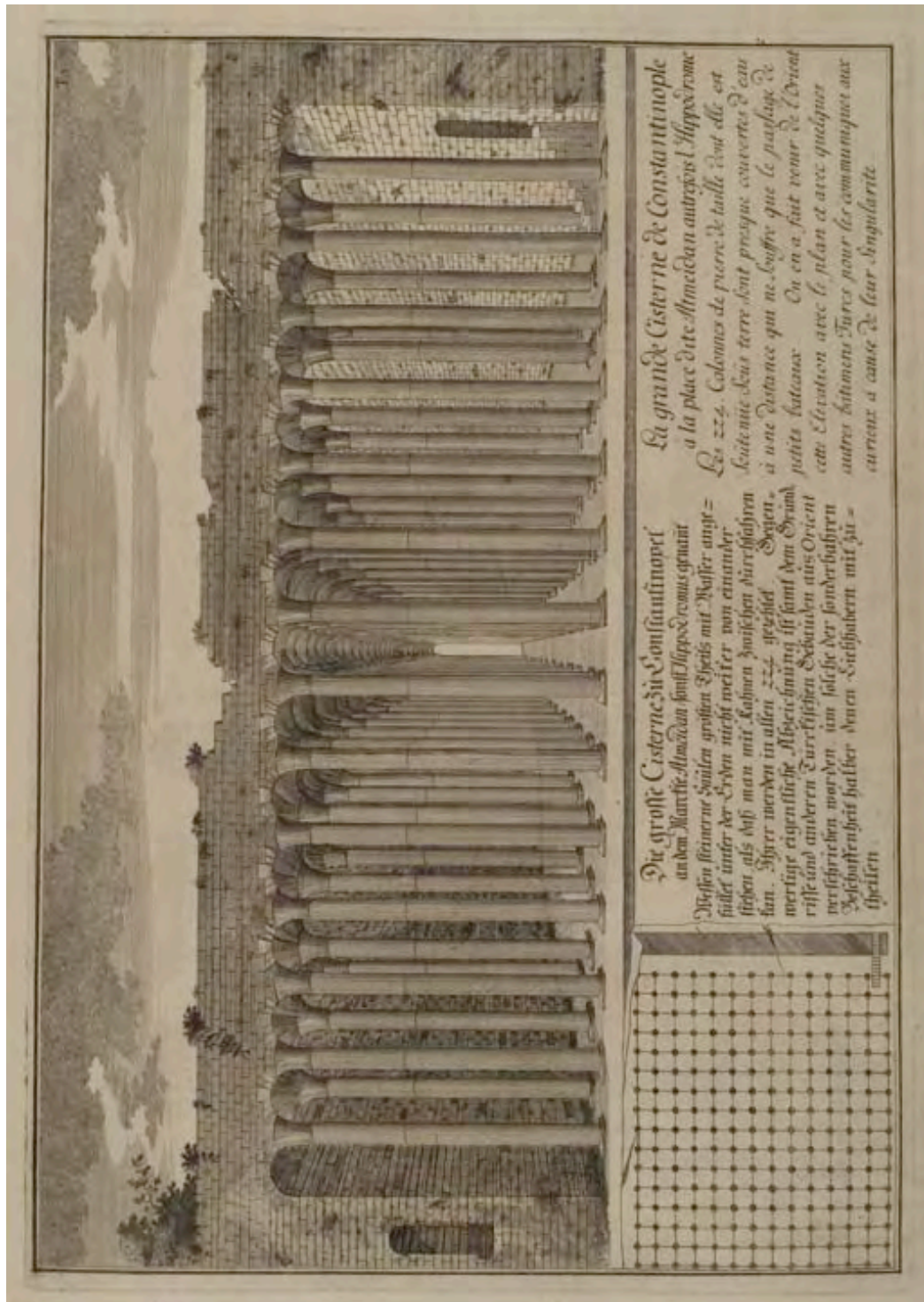


Fig. 3.8. Johann Bernhard Fischer von Erlach, view of the Basilica Cistern, *Entwurf Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnuß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III, Tafel V. Universitätsbibliothek Heidelberg.

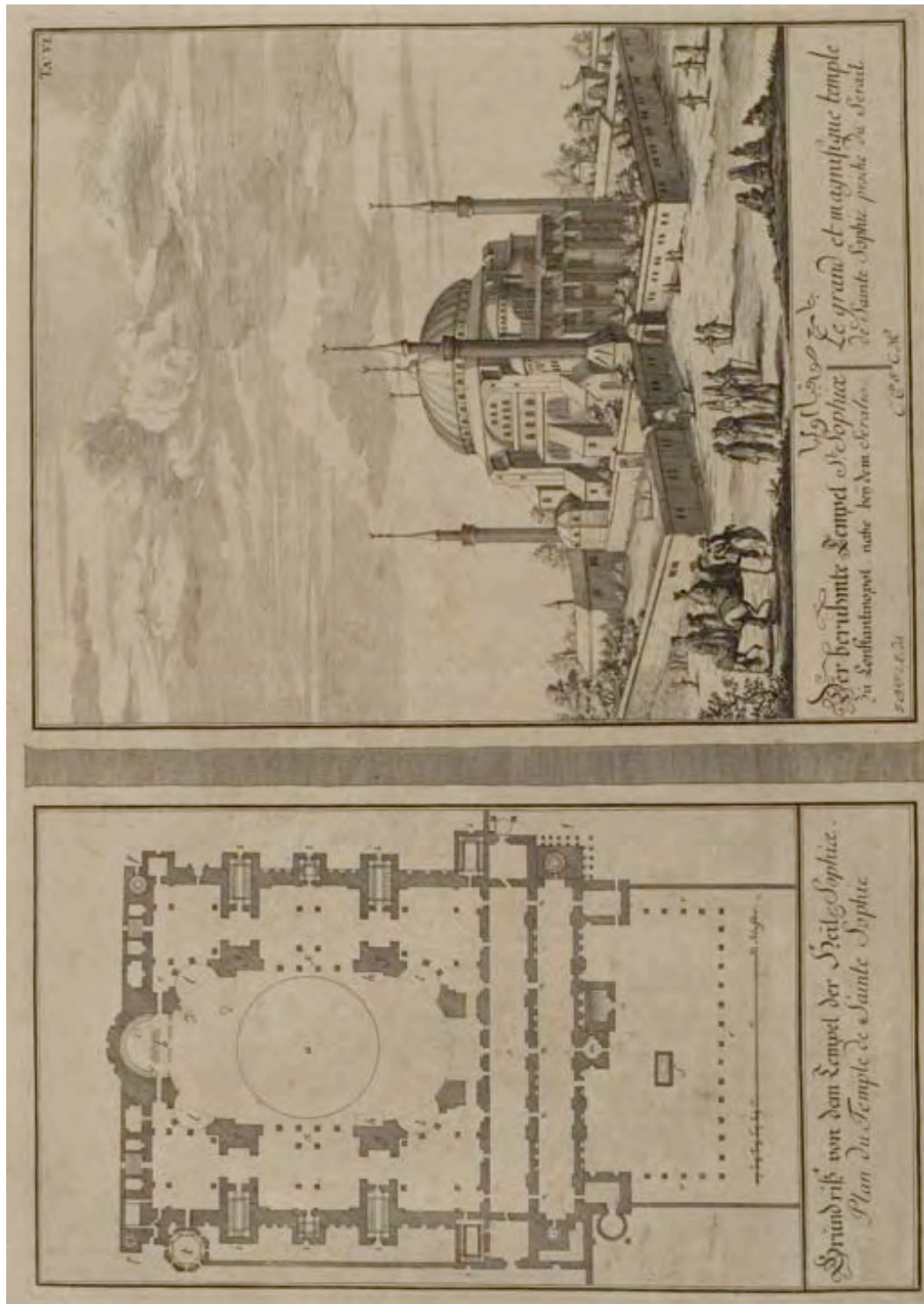


Fig. 3.9. Johann Bernhard Fischer von Erlach, view of the Hagia Sophia, *Entwurf Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III, Tafel VI. Universitätsbibliothek Heidelberg.

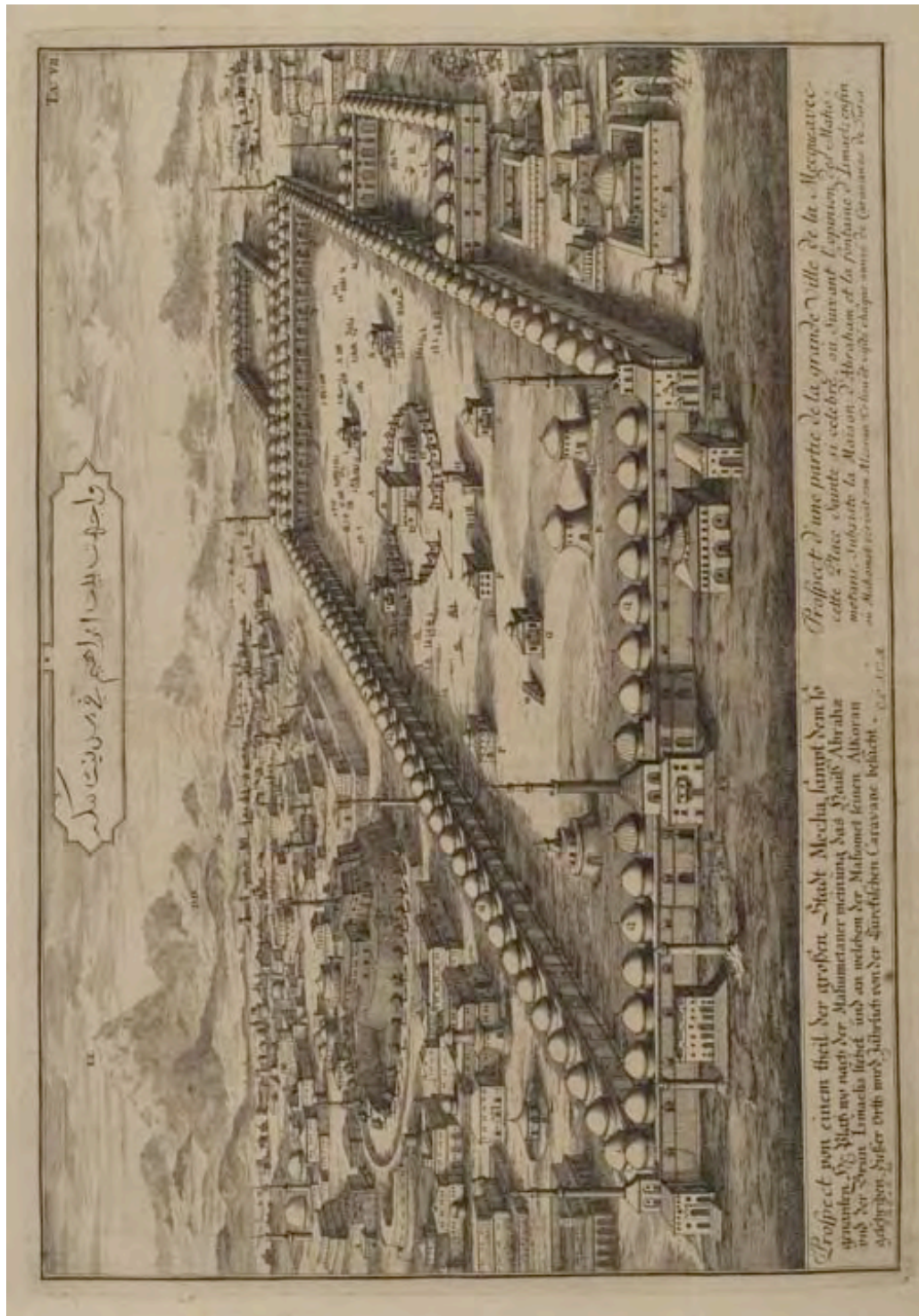


Fig. 3.10. Johann Bernhard Fischer von Erlach, view of Mecca, *Entwurf Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völker; und aus den Geschicht-büchen, Gedächtniß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III, Tafel VII. Universitätsbibliothek Heidelberg.

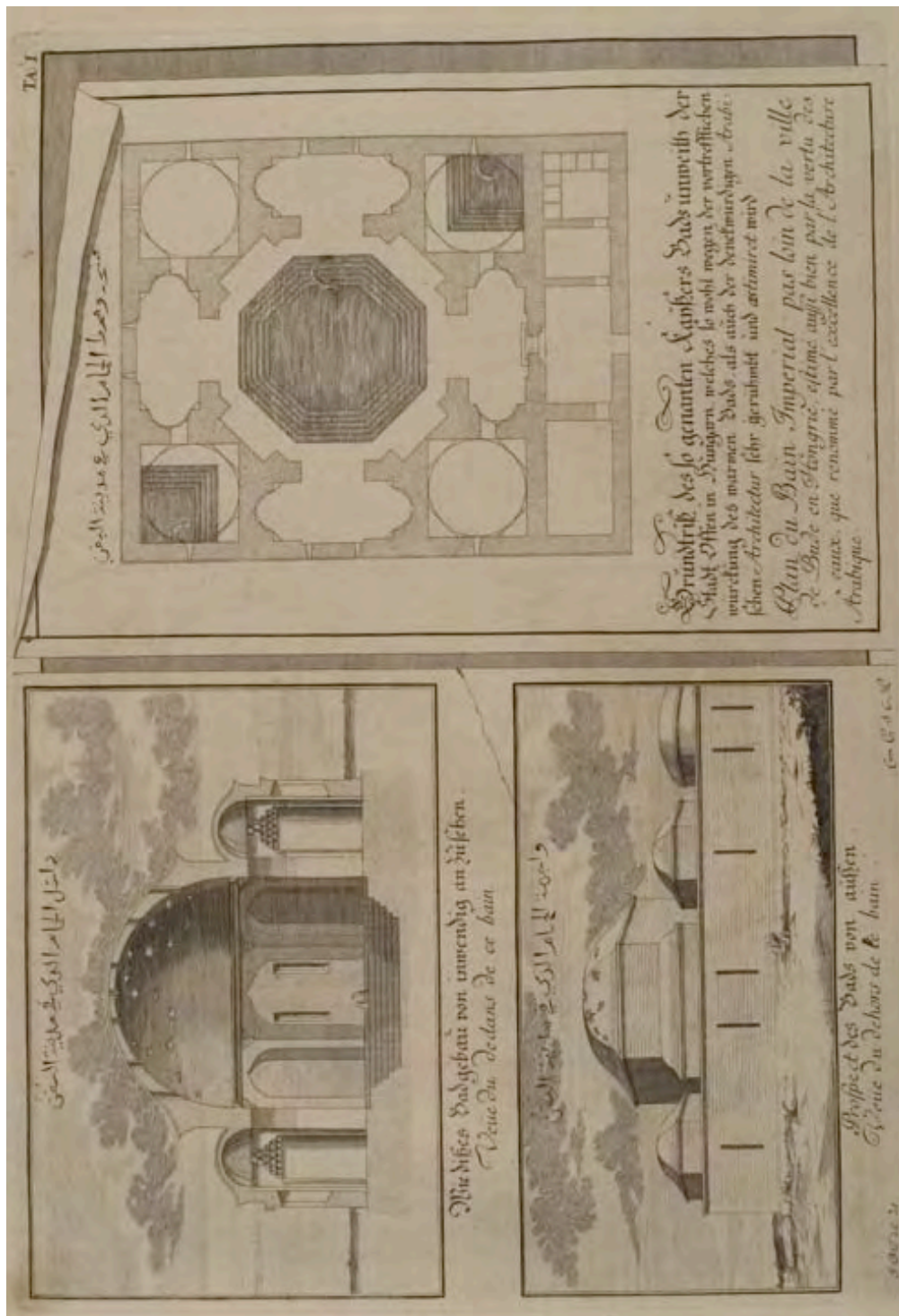


Fig. 3.11. Johann Bernhard Fischer von Erlach, view of the Turkish bath of Budapest, *Entwurf Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtniß-münzen, Ruinen, und eingeholten wahrhafften Abrißen, vor Augen zu stellen* (Leipzig, 1725), Buch III Tafel I. Universitätsbibliothek Heidelberg.

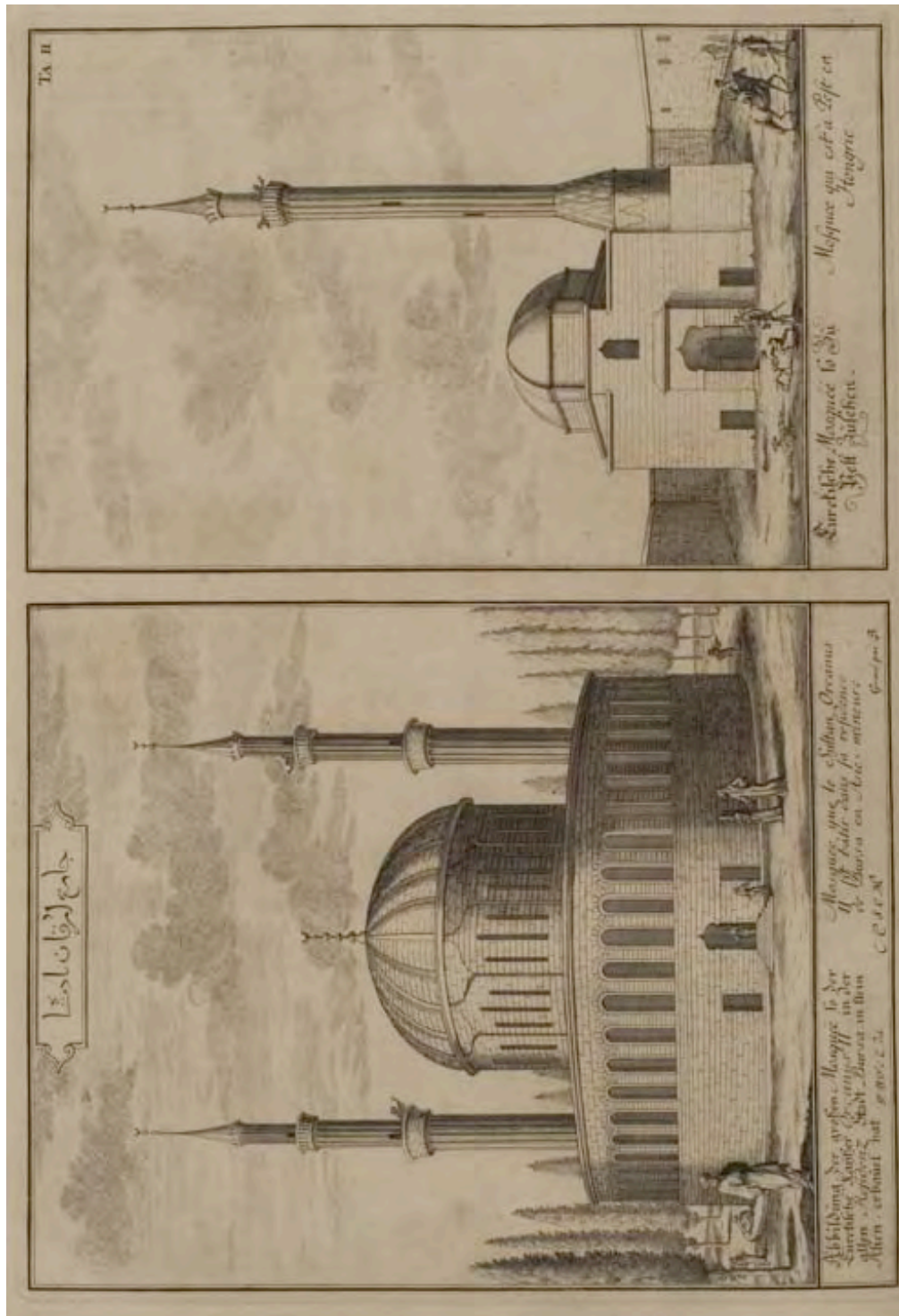


Fig. 3.12. Johann Bernhard Fischer von Erlach, comparison of Mosques of Bursa (left) and Hungary (right), *Entwurff Einer Historischen Architectur: In Abbildung unterschiedener berühmten Gebäude des Alterthums und fremder Völcker; und aus den Geschicht-büchen, Gedächtnüß-münzen, Ruinen, und eingeholten wahrhafften Abrißten, vor Augen zu stellen* (Leipzig, 1725), Buch III, Tafel II. Universitätsbibliothek Heidelberg.



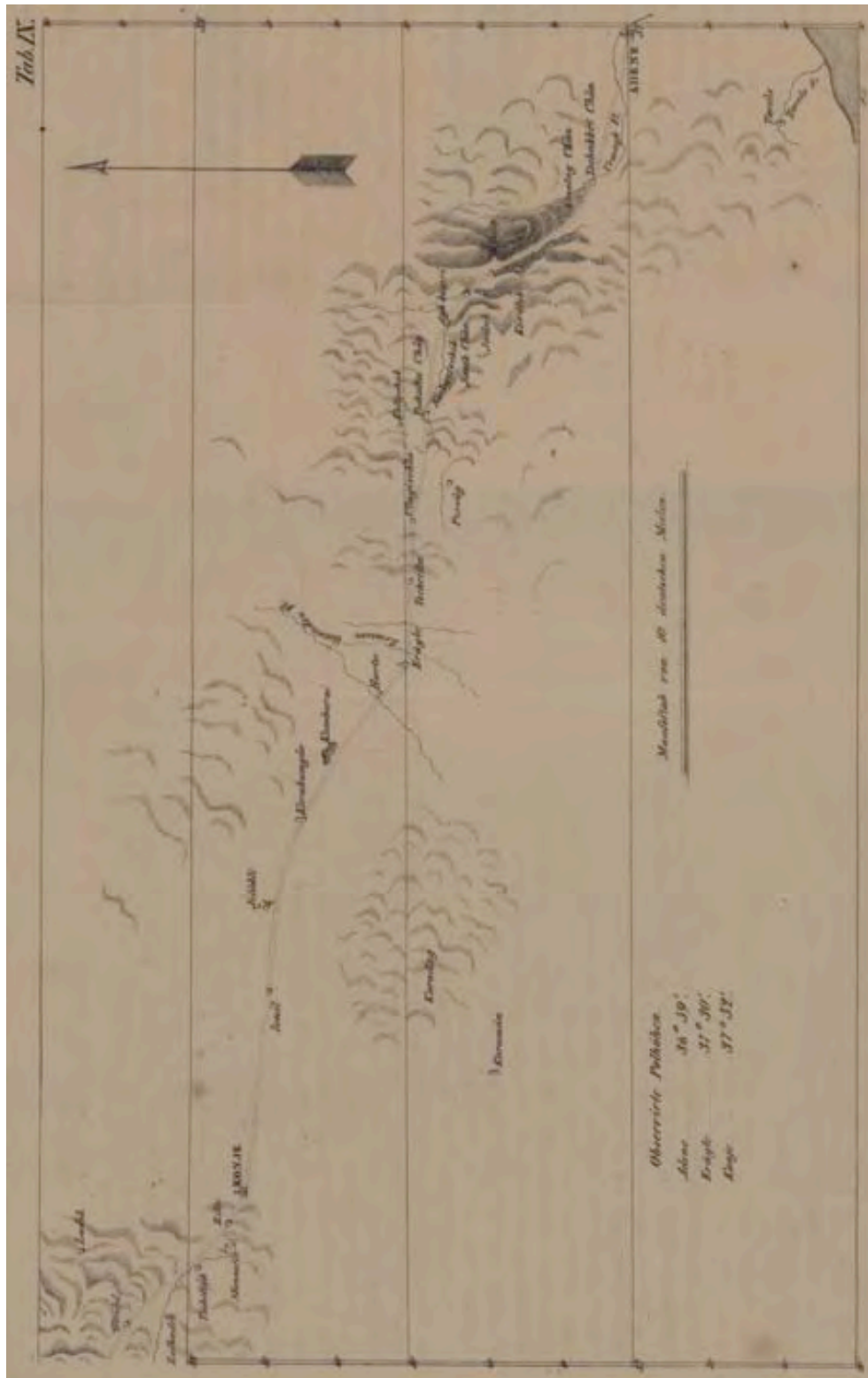


Fig. 3.14. Carsten Niebuhr, Konya, Adana and environs, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen: N. Moeller etc., 1772). SbB GfE G 2216 Band 3, 106.

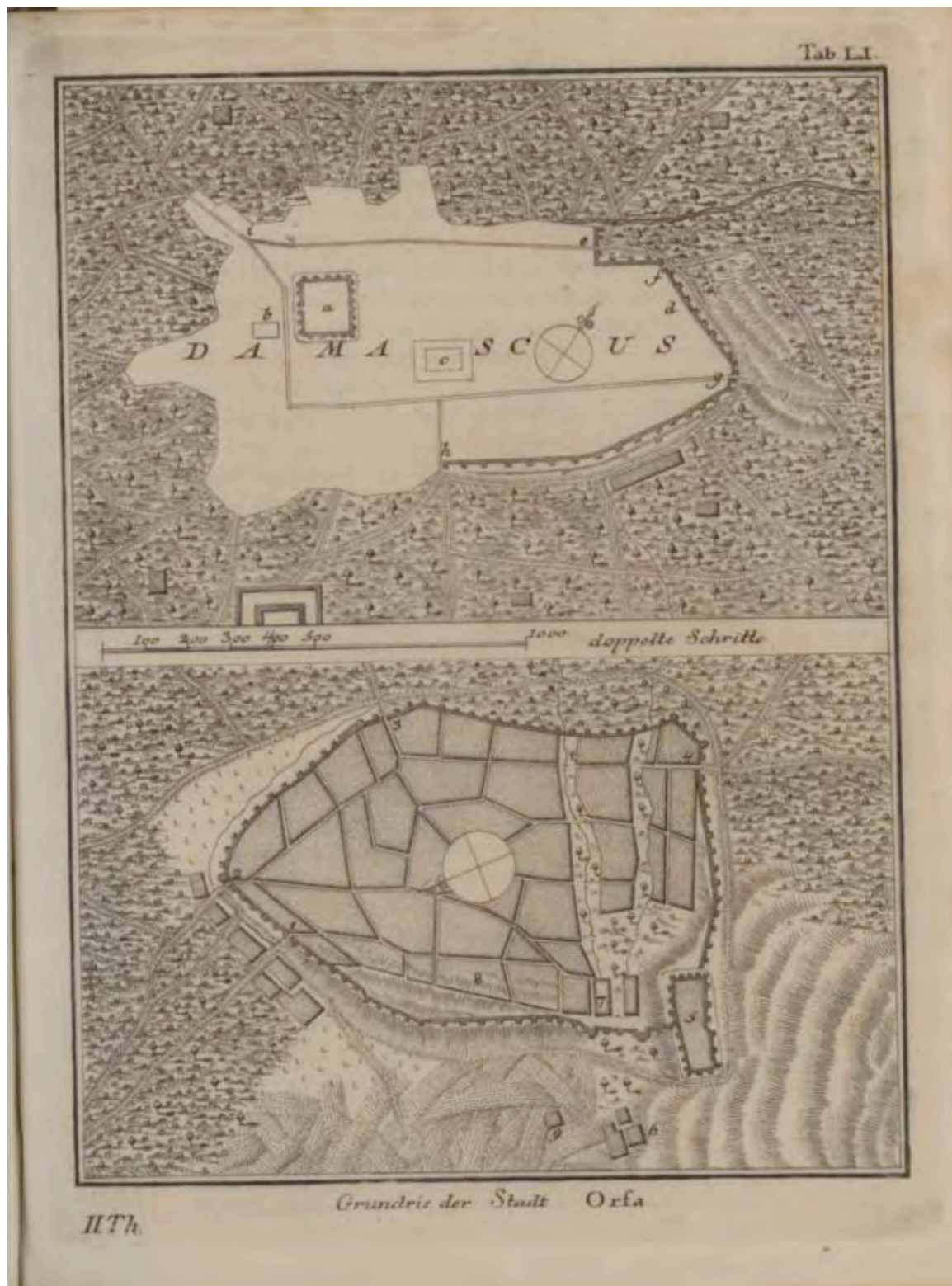


Fig. 3.15. Carsten Niebuhr, plans of Damascus and Şanlıurfa, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen, N. Moeller etc., 1772). SbB GfE G 2216 Band 2, 408.

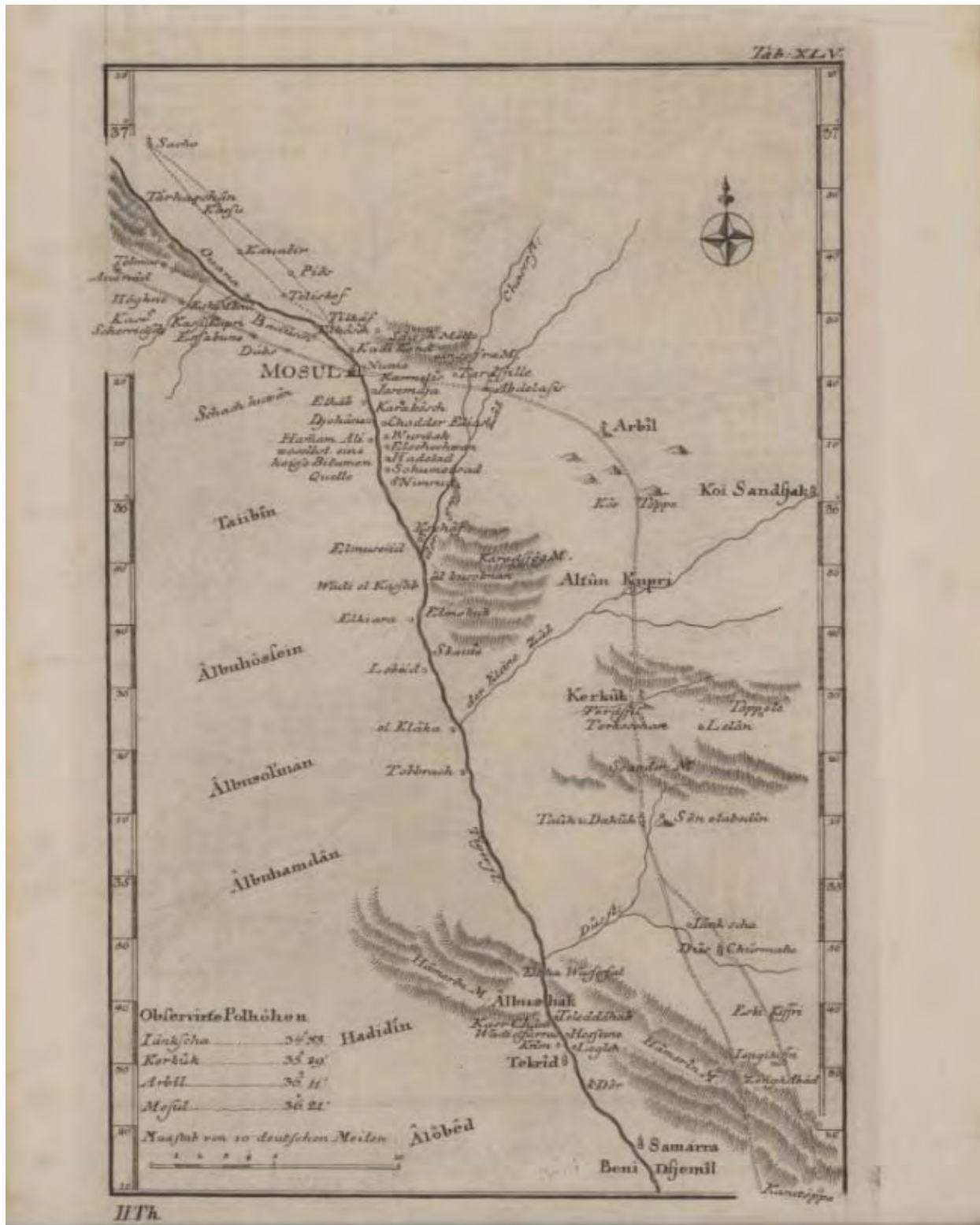
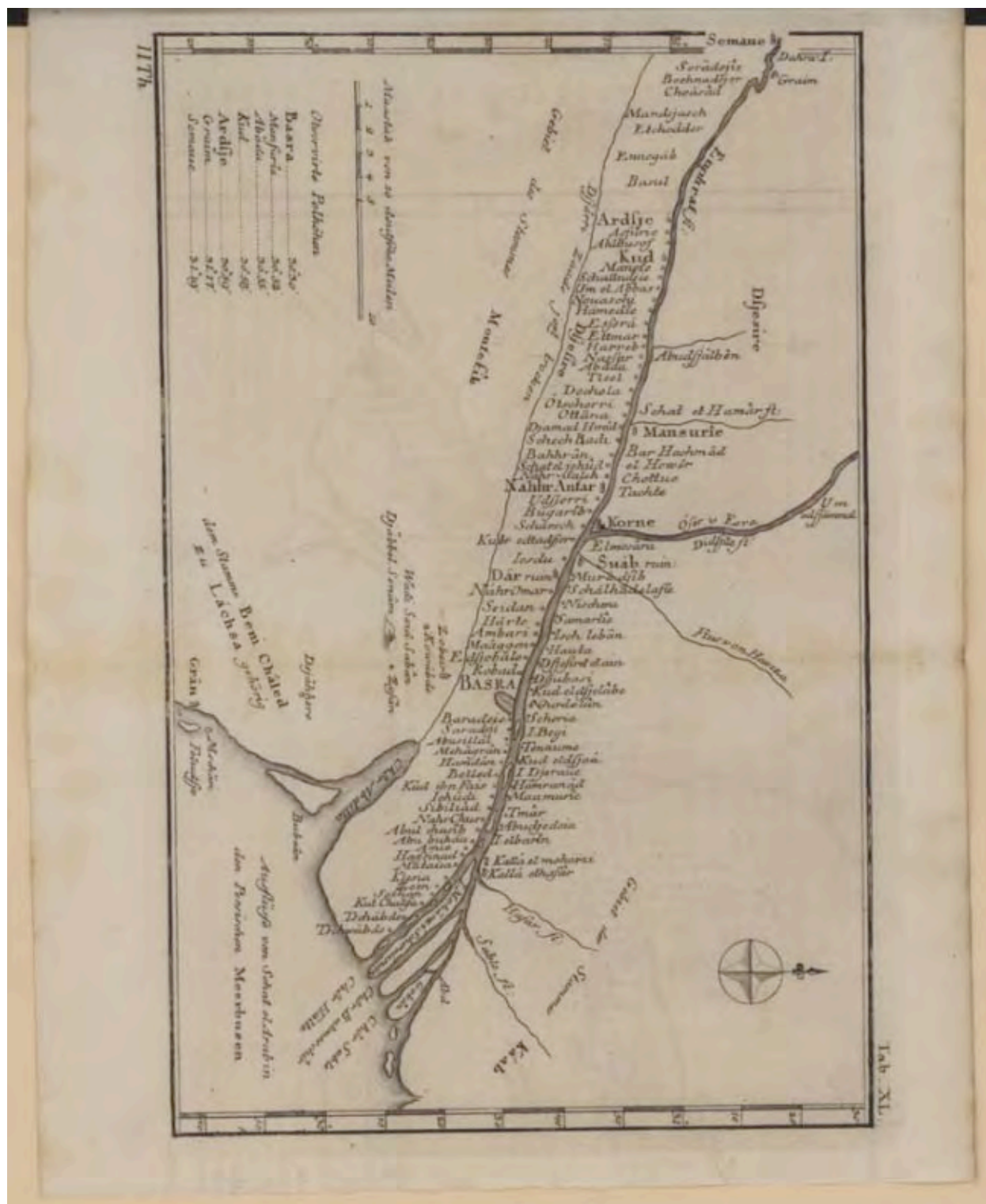


Fig. 3.16. Carsten Niebuhr, Plan of Mosul, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen: N. Moeller etc., 1772). SbB GfE G 2216 Band 2, 360.



Fig. 3.17. Carsten Niebuhr, map of Baghdad and environs, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen: N. Moeller etc., 1772). SbB GfE G 2216 Band 2, 296.



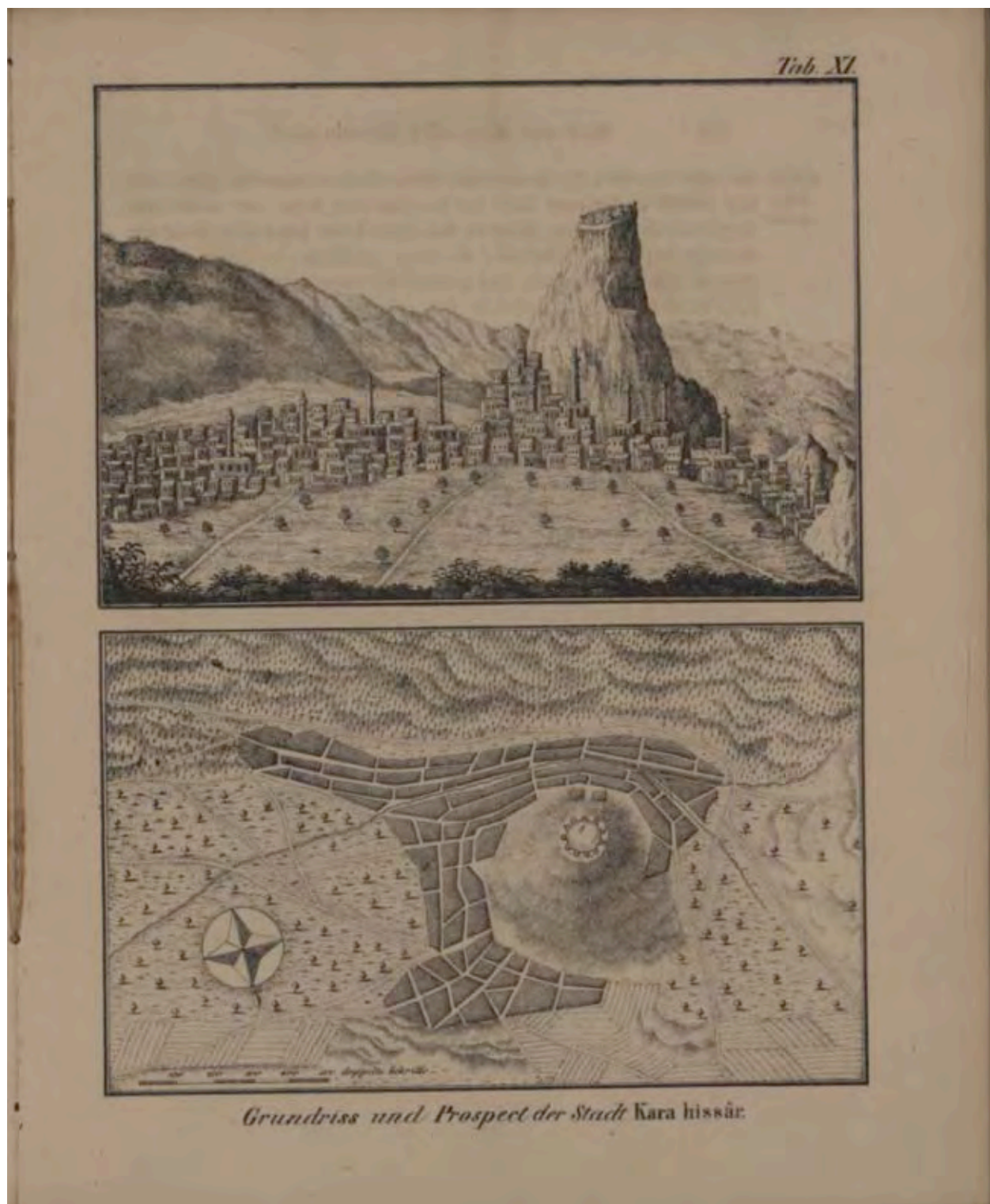


Fig. 3.19. Carsten Niebuhr, Plan and depiction of Afyonkarahisar, *Beschreibung von Arabien aus eigenen Beobachtungen und in Lande selbst gesammelten Nachrichten abgefasst* (Copenhagen: N. Moeller etc., 1772). SbB GfE G 2216 Band 3, 132.

49

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847



Fig. 3.24. Karl von Vincke, Plan of Ankara, 1839. SbB 44807, sheet 11.

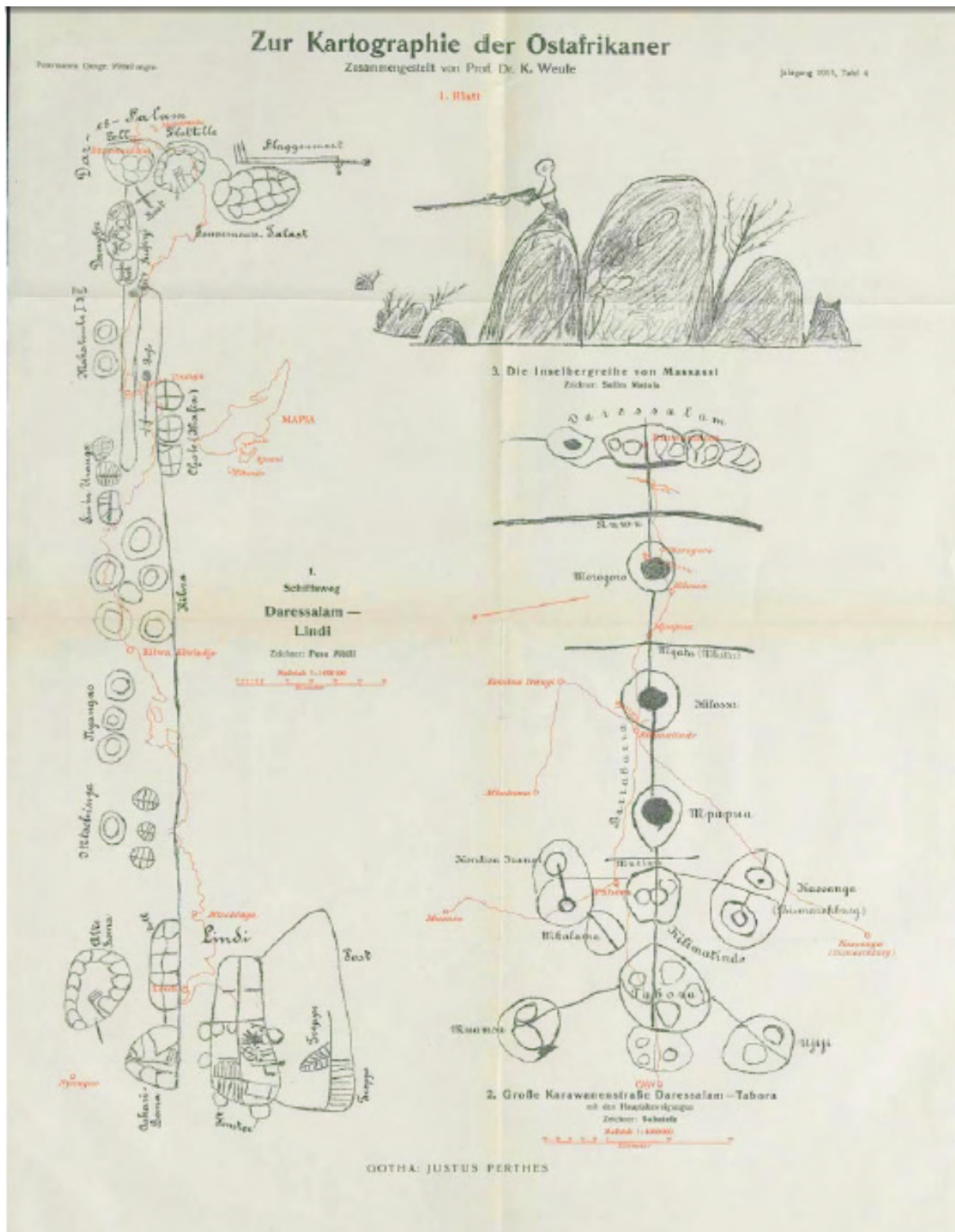


Fig. 3.25. Karl Weule, “Regarding the cartography of East Africans,” (Part 1) from *Petermann’s Mitteilungen*, 1906. SPG Geogr 4° 00022/01 (61).

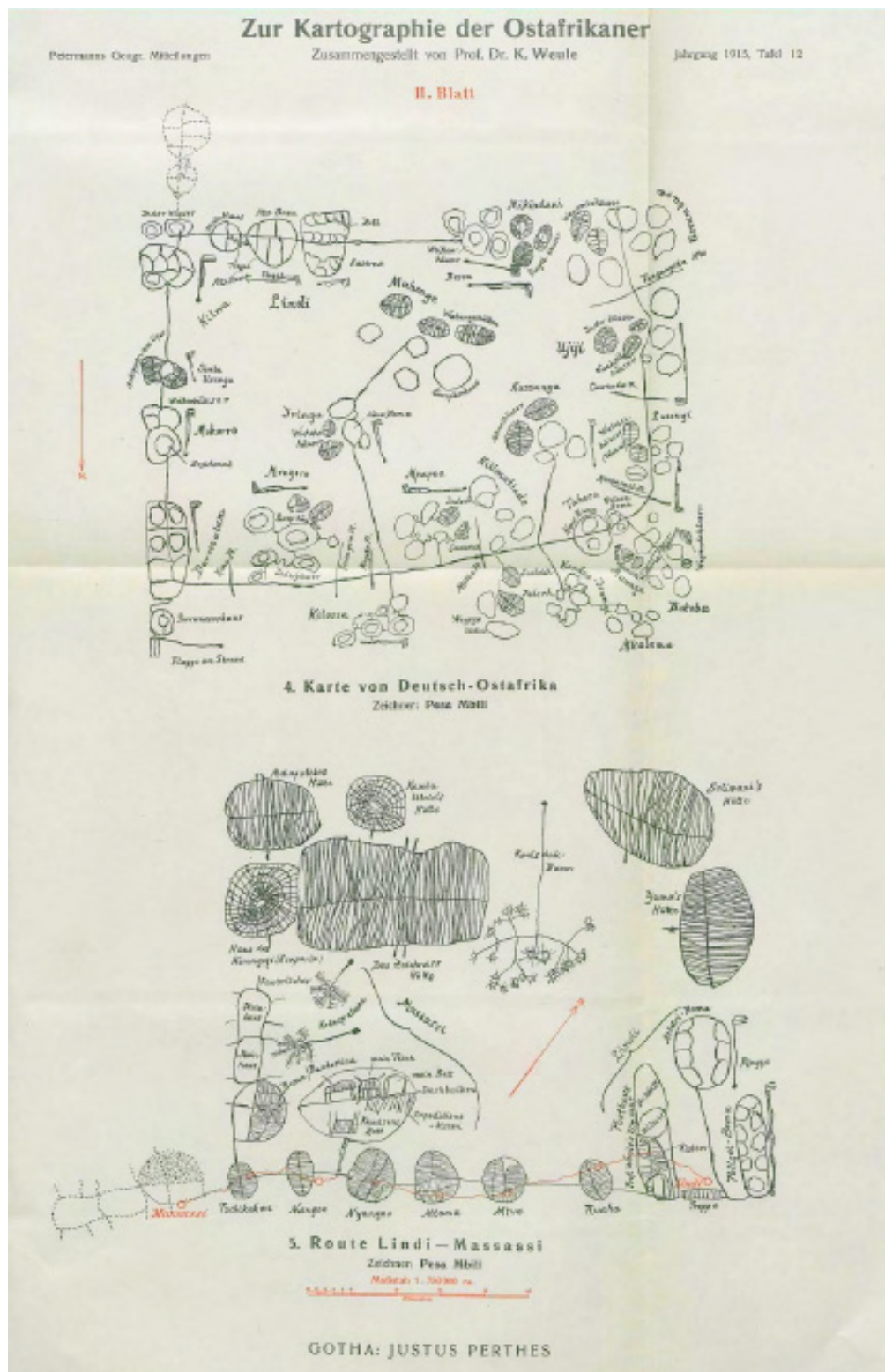


Fig. 3.26. Karl Weule, “Regarding the cartography of East Africans,” (Part 2) from *Petermann’s Mitteilungen*, 1906. SPG Geogr 4° 00022/01 (61).



Fig. 3.27. Wilhelm von Pressel (attributed), Mediterranean to Persian Gulf tracing with detail of the Gulf of İskenderun, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.

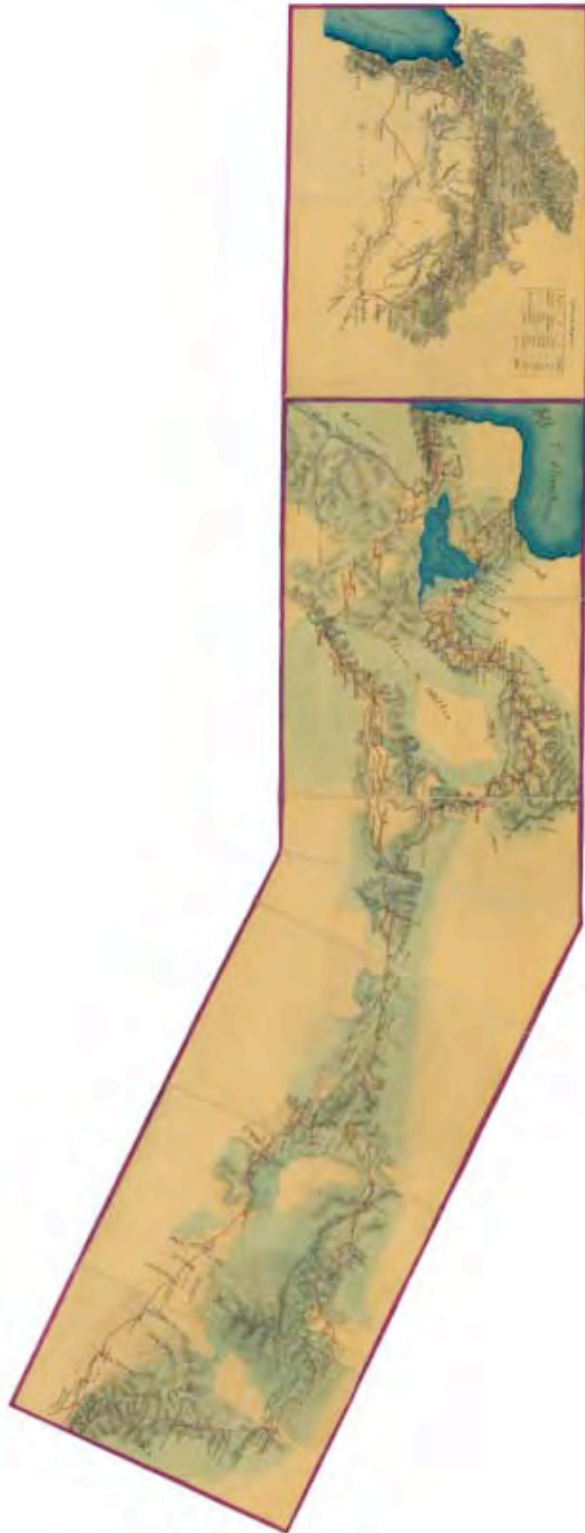


Fig. 3.28. Wilhelm von Pressel (attributed), Mediterranean-Baghdad tracing, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.

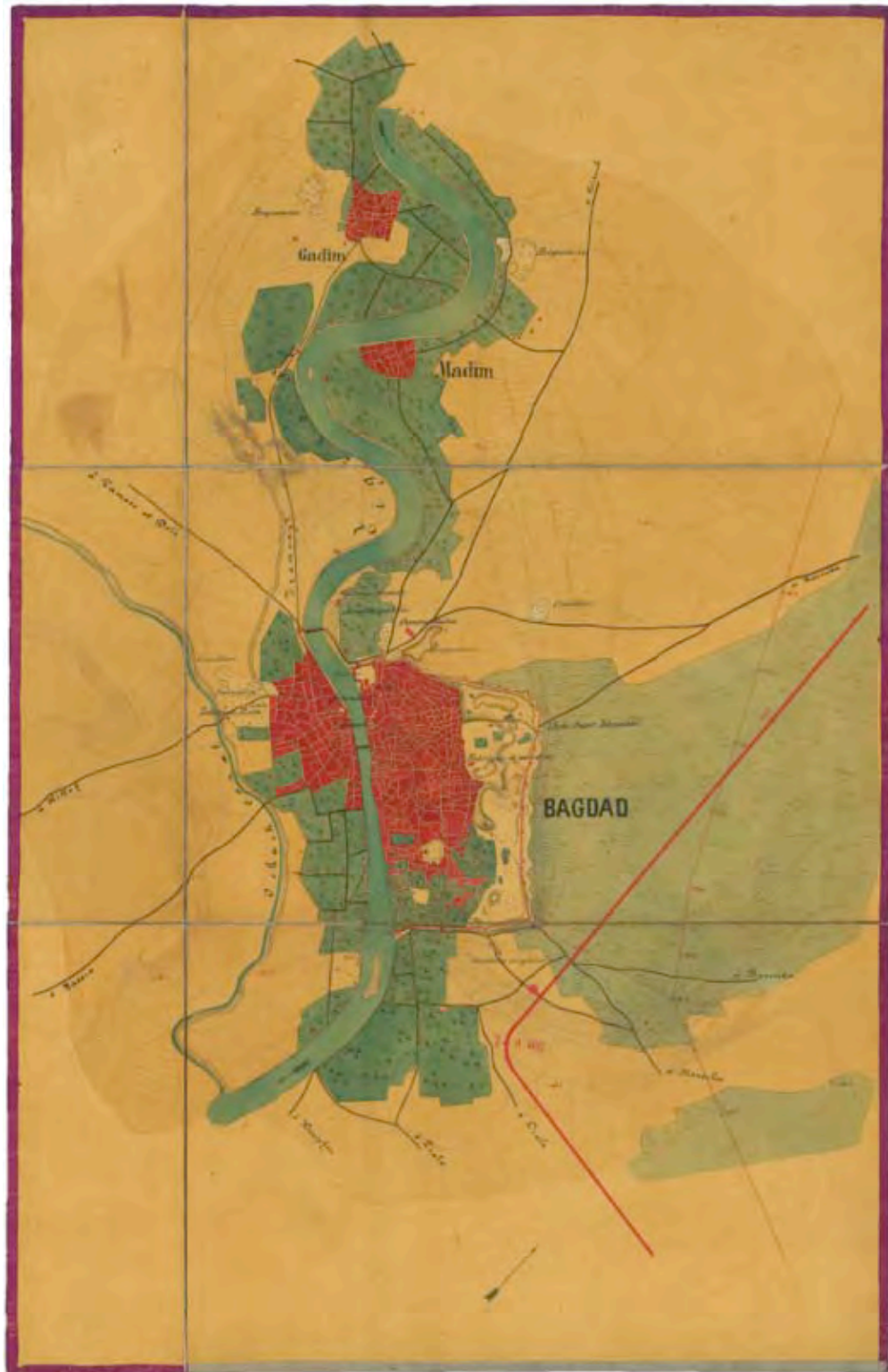


Fig. 3.29. Wilhelm von Pressel (attributed), plan of Baghdad, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.30. Wilhelm von Pressel (attributed), plan of Tuz Khormato and environs, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.

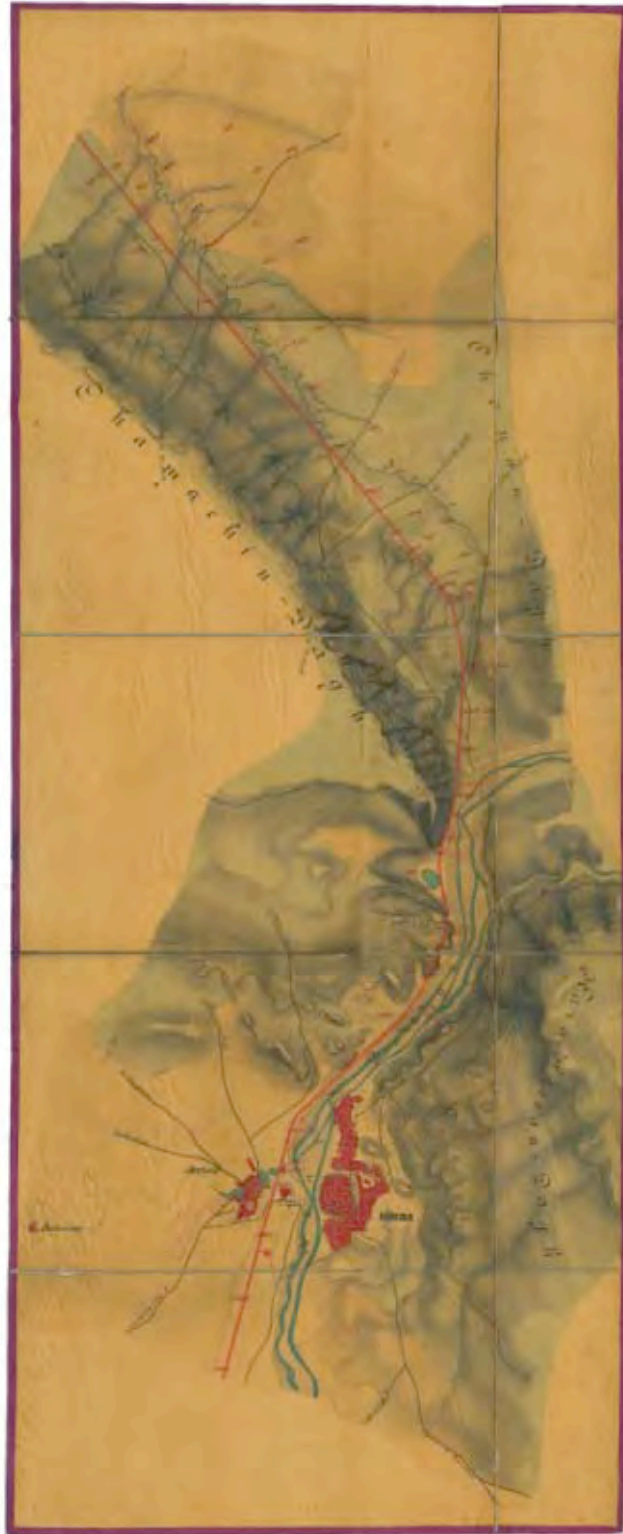


Fig. 3.31. Wilhelm von Pressel (attributed), plan of Kirkuk and environs, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.32. Wilhelm von Pressel (attributed), plan of Mosul and environs, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.33. Wilhelm von Pressel (attributed), train study, Zakho and environs, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.34. Wilhelm von Pressel (attributed), urban studies folio; Antakya, Aleppo, Gaziantep, Birecik, Şanlıurfa, Diyarbakır, Mardin, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.

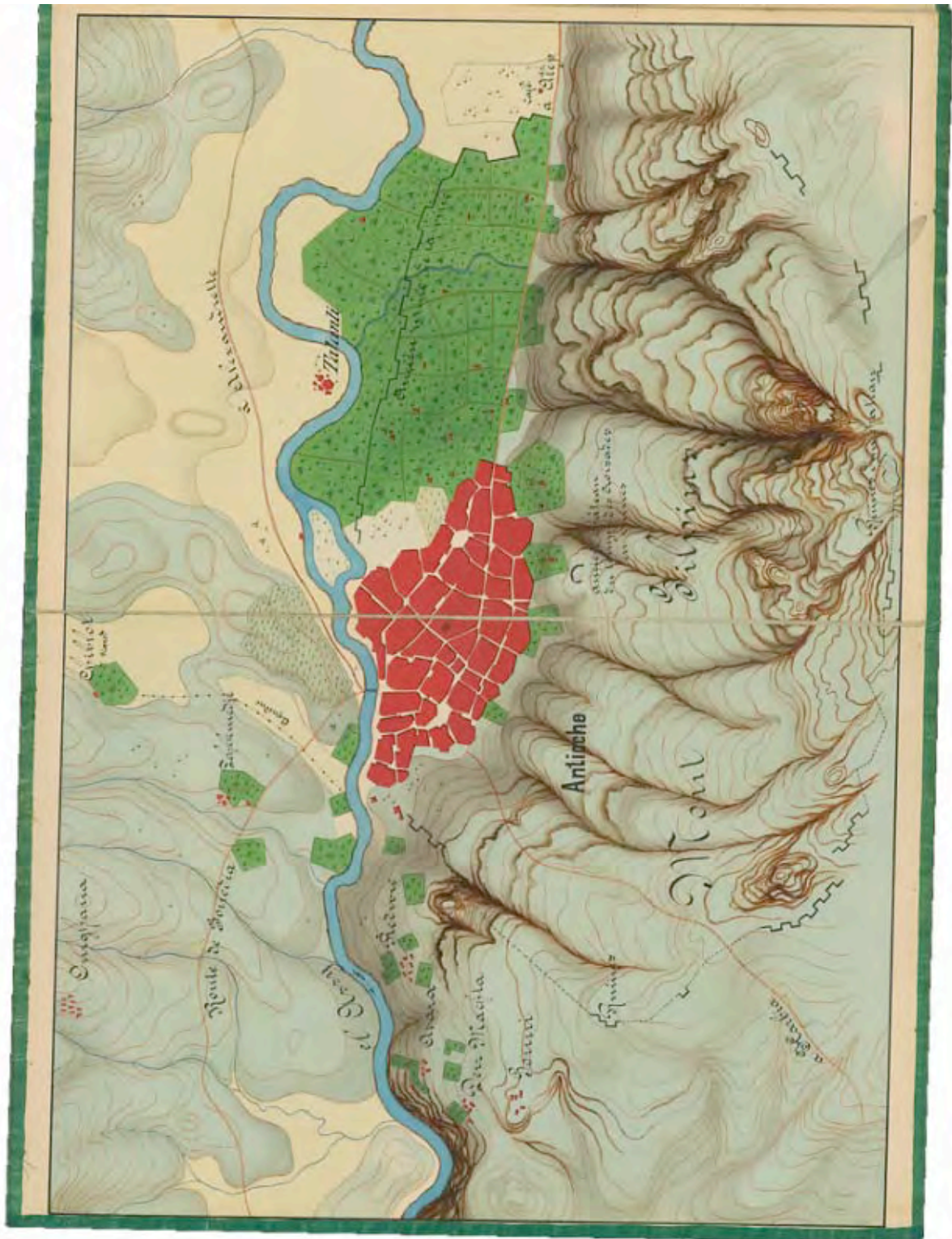


Fig. 3.35. Wilhelm von Pressel (attributed), urban studies folio; Antakya (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.36. Wilhelm von Pressel (attributed), urban studies folio; Aleppo (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.37. Wilhelm von Pressel (attributed), urban studies folio; Birecik (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.38. Wilhelm von Pressel (attributed), urban studies folio; Diyarbakır (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.39. Wilhelm von Pressel (attributed), urban studies folio; Mardin (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.40. Wilhelm von Pressel (attributed), urban studies folio; Gaziantep (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.

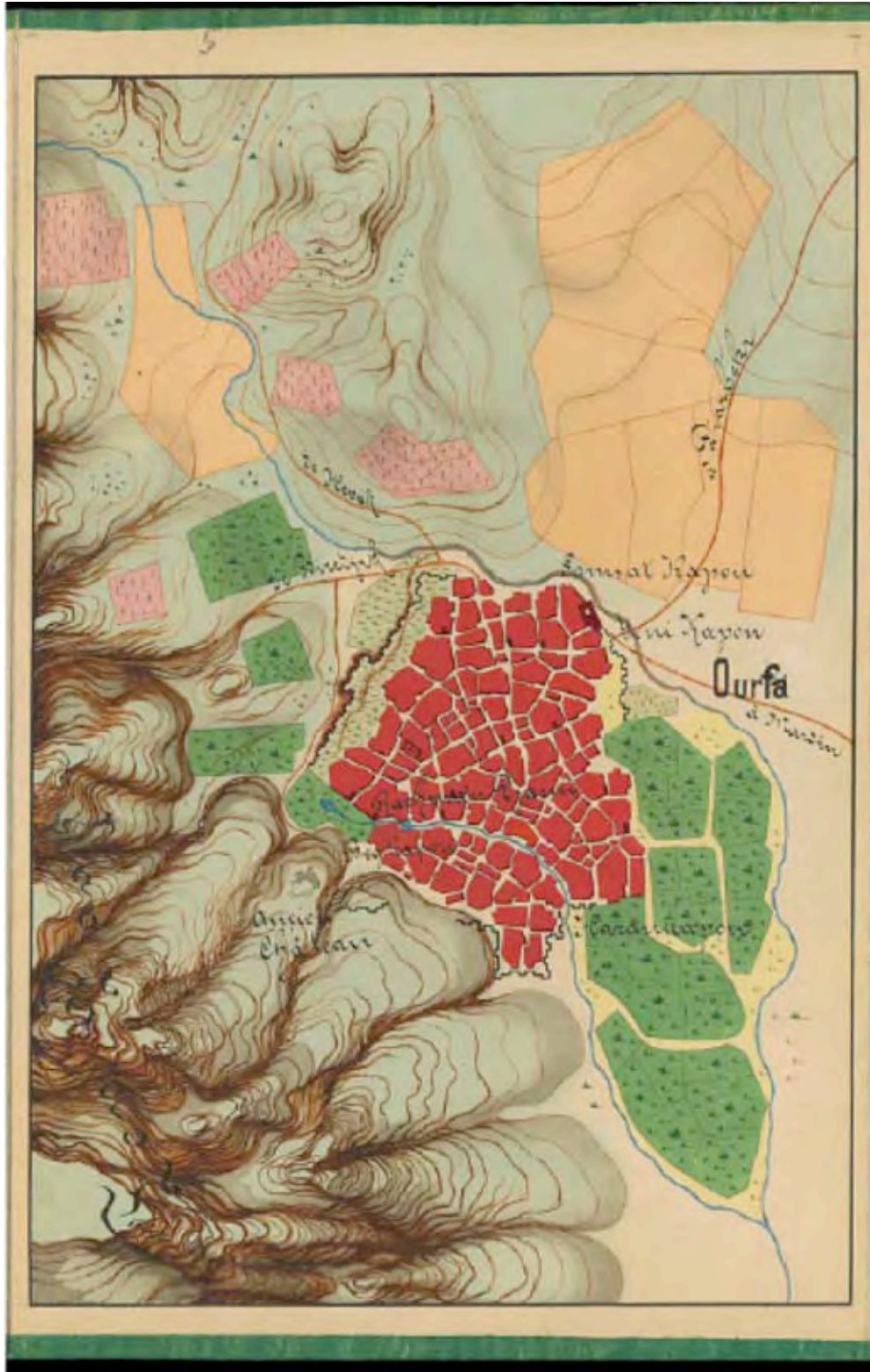


Fig. 3.41. Wilhelm von Pressel (attributed), urban studies folio; Şanlıurfa (detail), c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.42. Wilhelm von Pressel (attributed), city and port study of Iskenderun, c. 1871. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.43. Wilhelm von Pressel (attributed), Haydarpaşa, Kadıköy, Üsküdar and environs, c. 1872. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.

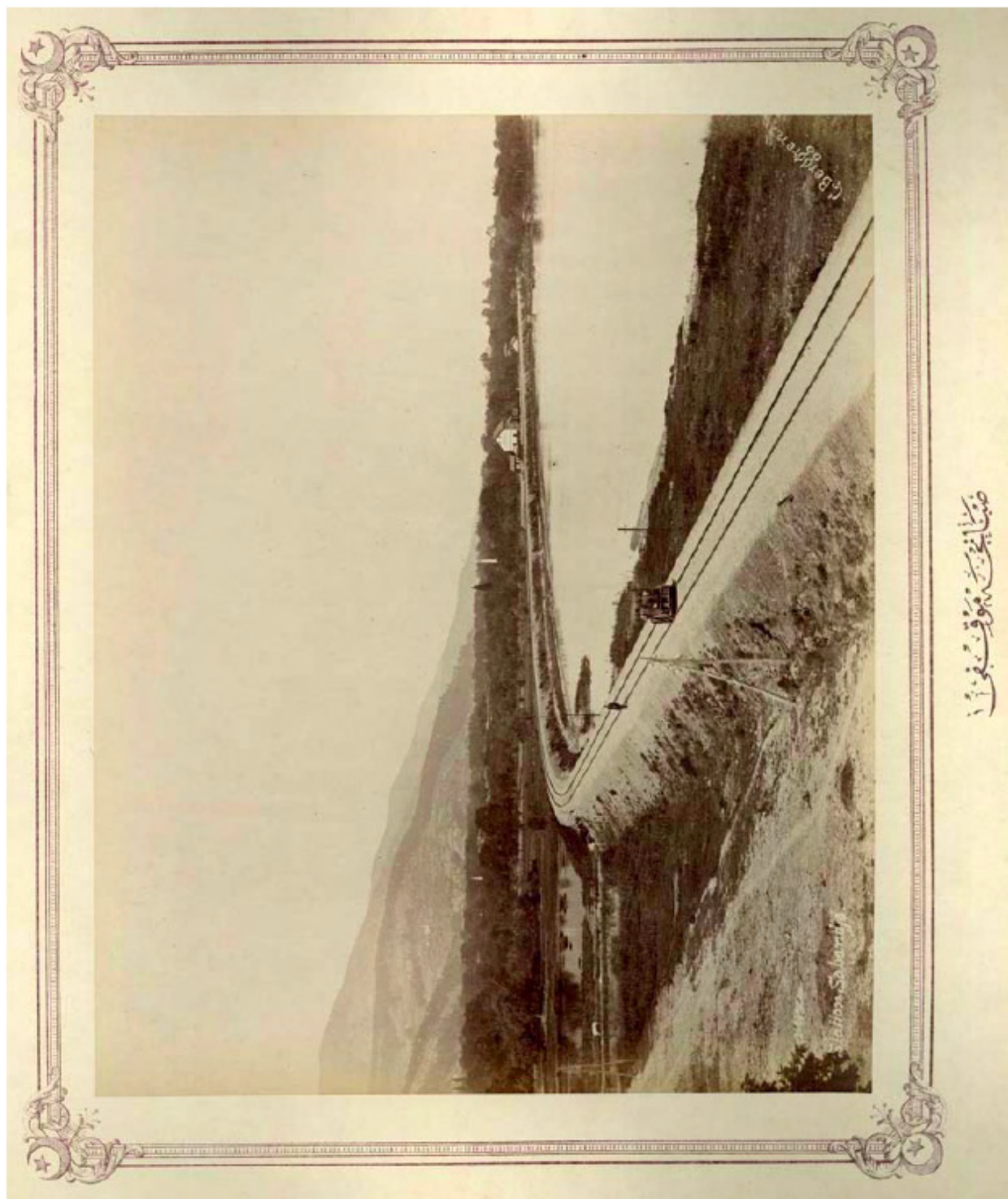


Fig. 3.44. Guillaume Gustave Berggren, View of Sapanca station, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.



Fig. 3.45. Wilhelm von Pressel (attributed), partial İzmit–Eskişehir tracing along the Sakarya River, c. 1872. DM NL 13 / II Schachtel 017. Photo: Deutsches Museum.



Fig. 3.46. Wilhelm von Pressel (attributed), wooden railway trace, Kostajnica-Novigrad (Bosnia), c.1872. DM NL 13 / II Schachtel 021. Photo: Deutsches Museum.

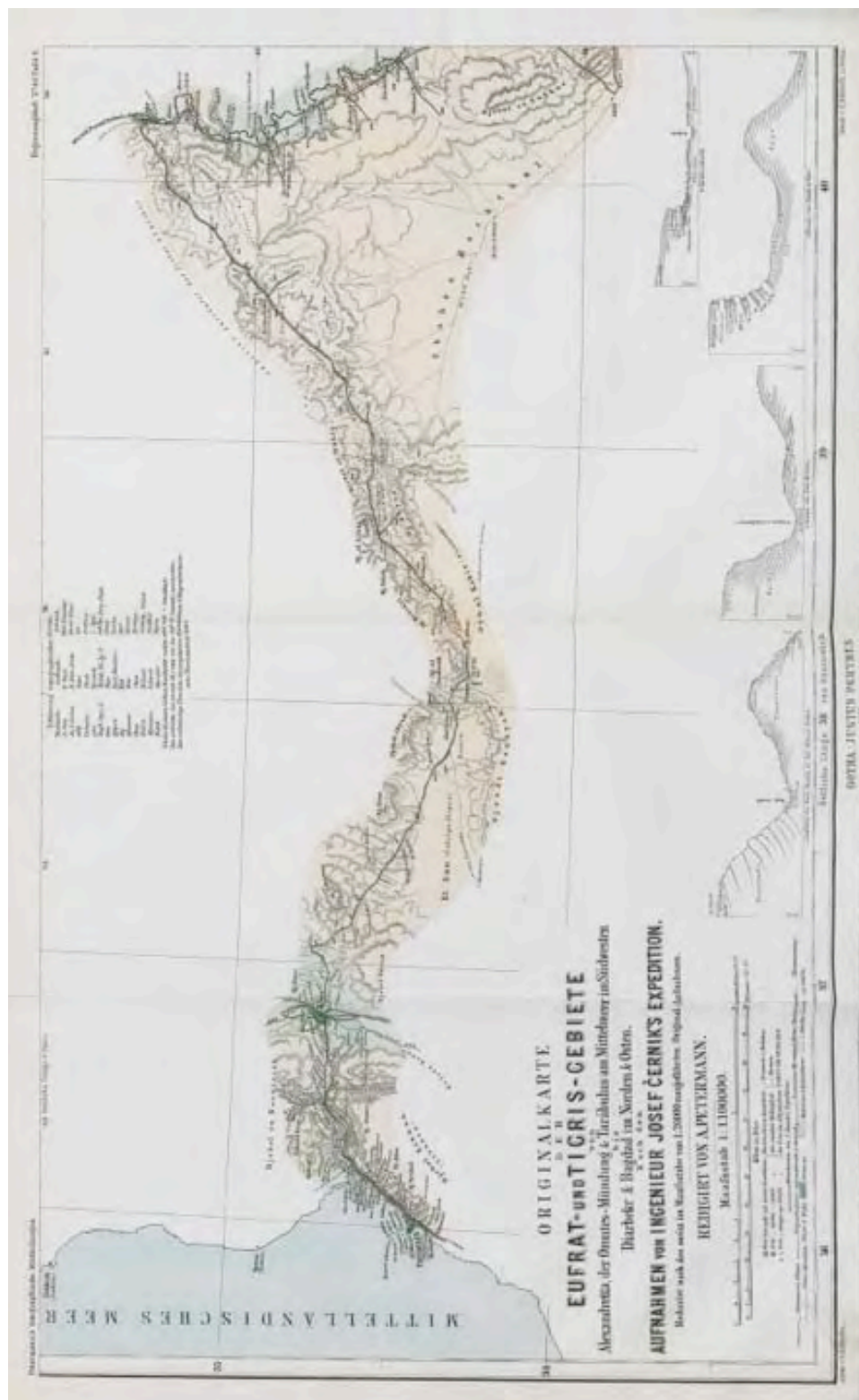


Fig. 3.47. Josef Černík expedition study, Euphrates and Tigris basins, 1875. SPG *Petermann's Mitteilungen*, Geogr 4° 00021/01(10,44).

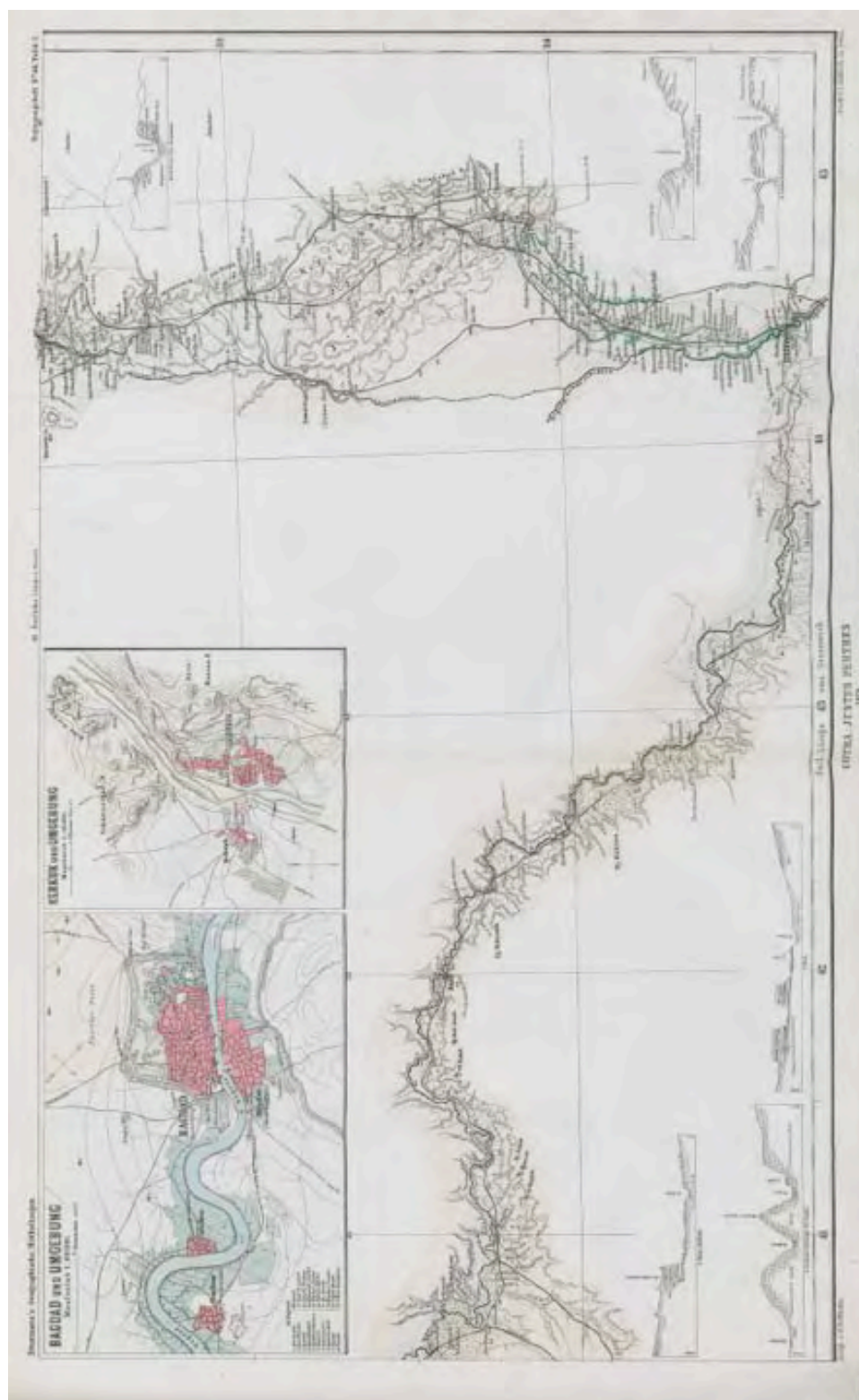


Fig. 3.48. Josef Černík expedition study, Baghdad, Kirkuk and environs, 1875. SPG *Petermann's Mitteilungen*, Geogr 4° 00021/01(10,44).

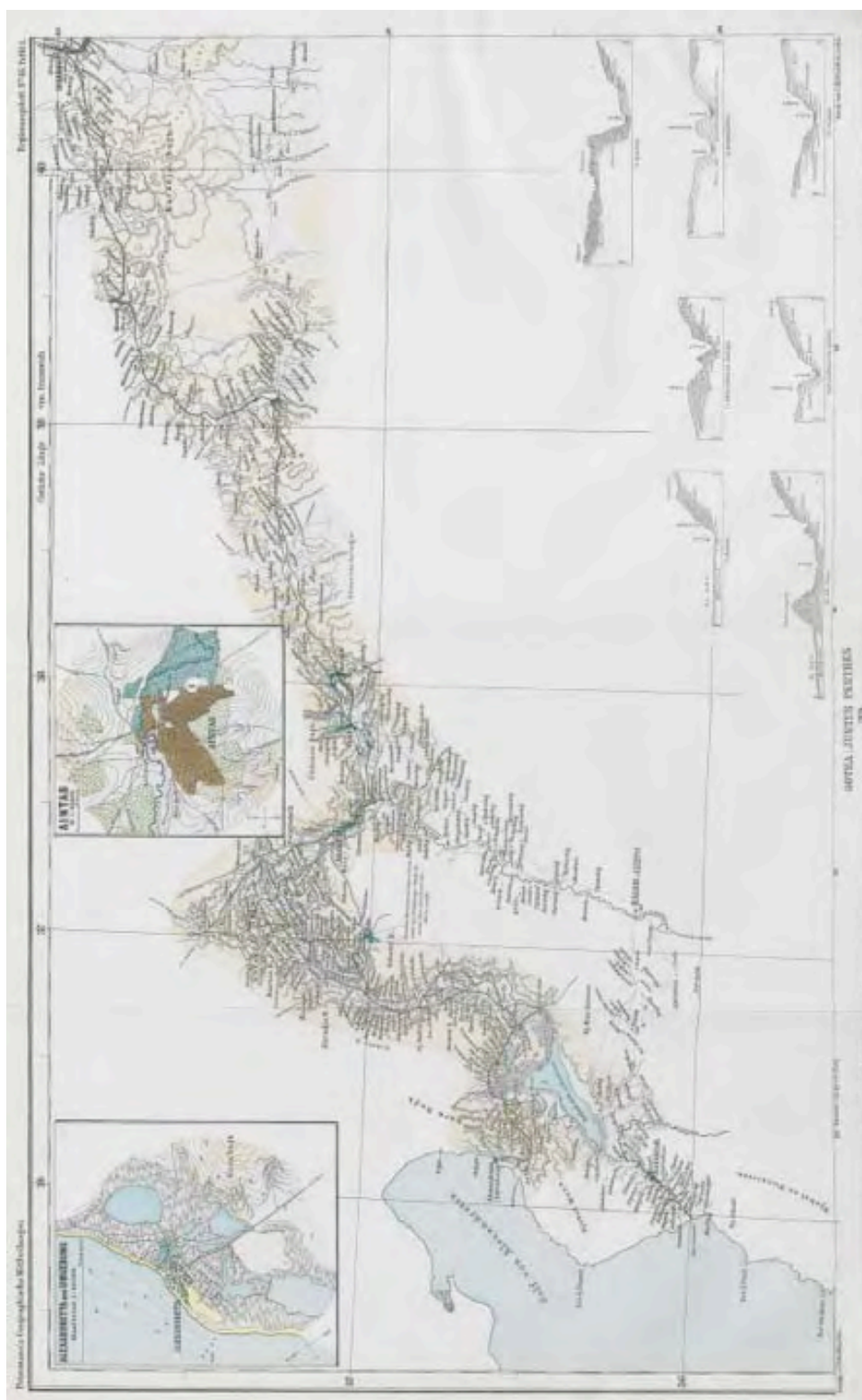


Fig. 3.49. Josef Černík expedition study, Gulf of Alexandretta and environs, 1876. SPG *Petermann's Mitteilungen*, Geogr 4° 00021/01(10,45).

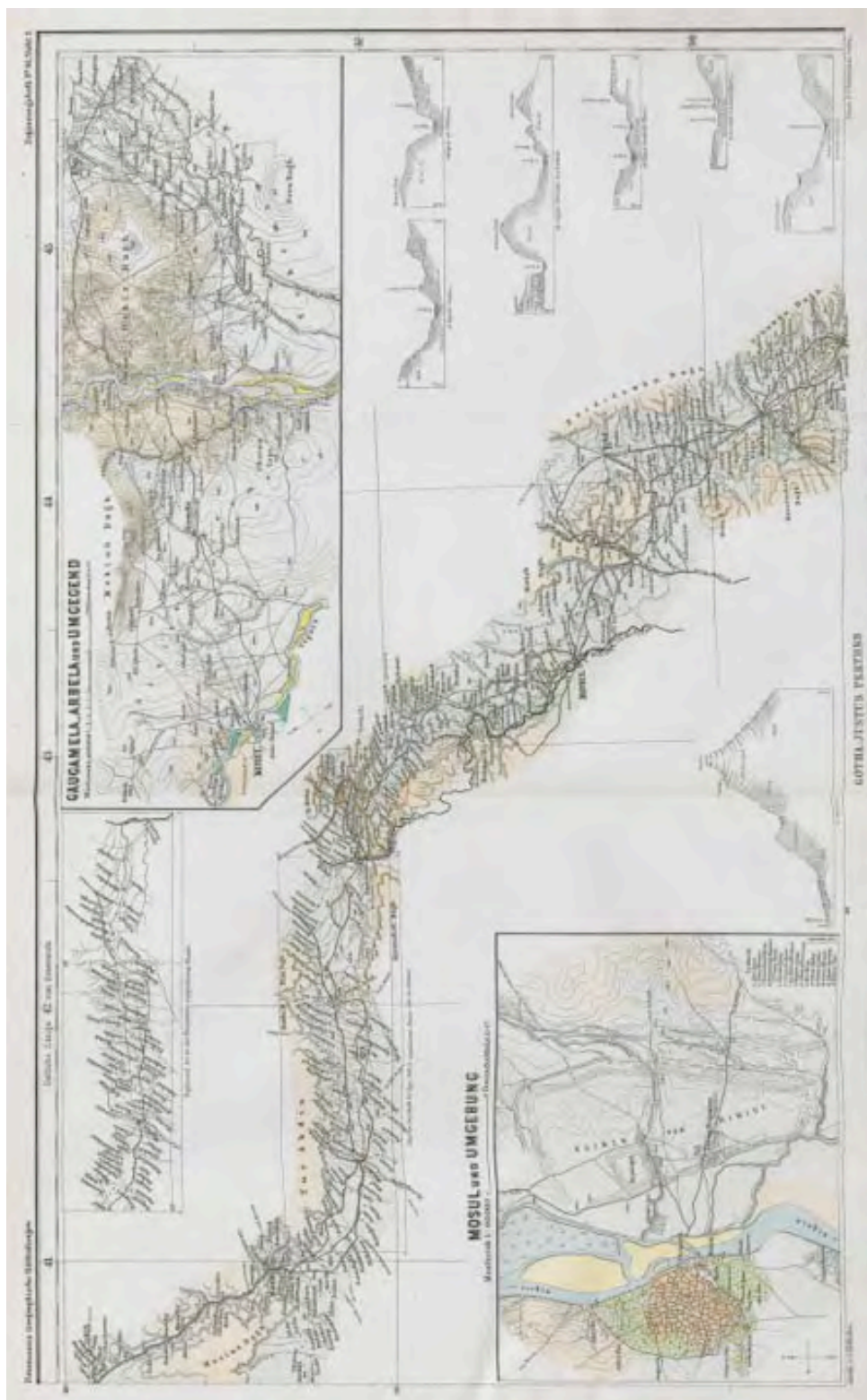


Fig. 3.50. Josef Černík expedition study, Mosul, Erbil and environs, 1876. SPG *Petermann's Mitteilungen*, Geogr 4° 00021/01(10,45).

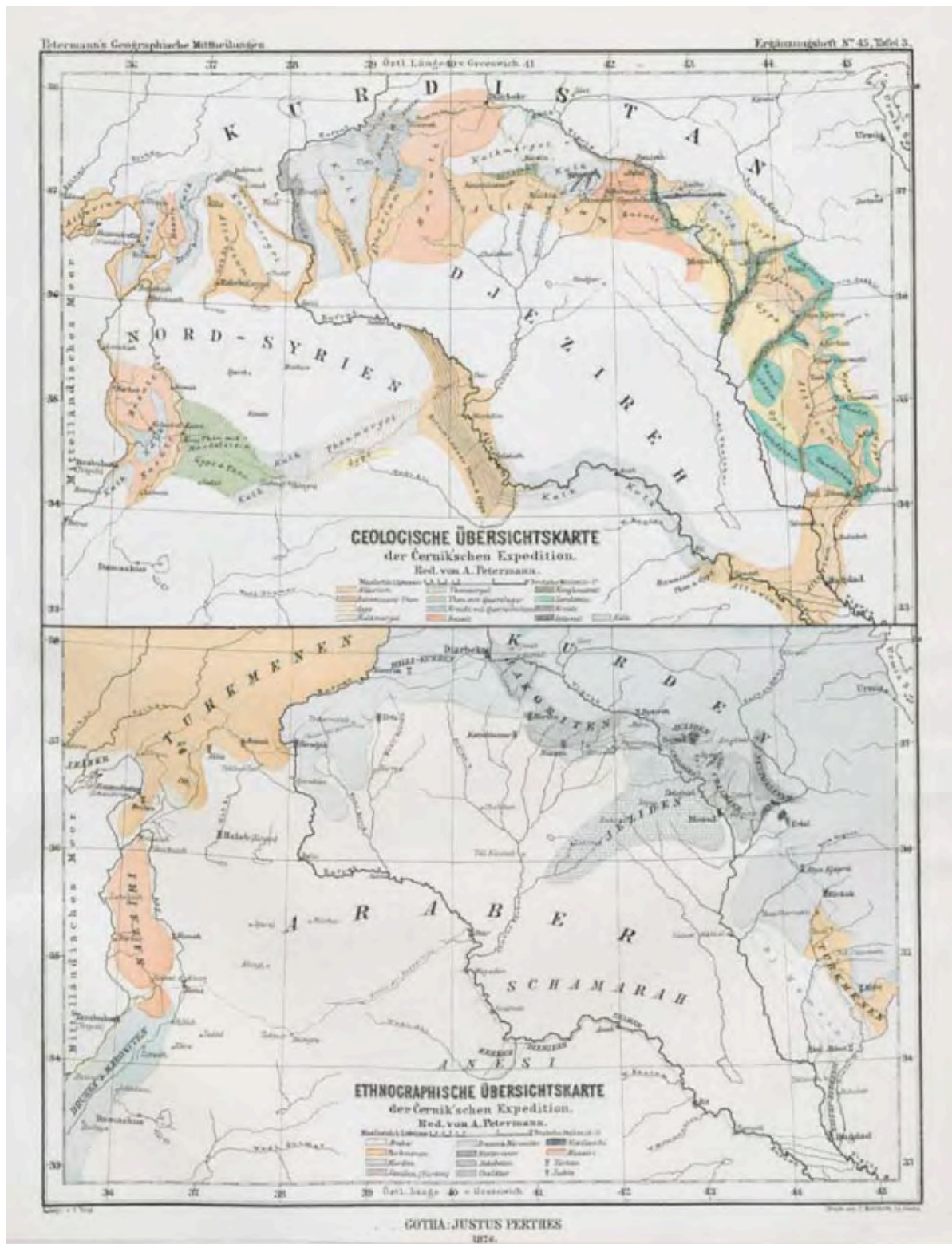


Fig. 3.51. Josef Černík expedition study, geological and ethnographic overviews, 1876. SPG *Petermann's Mitteilungen*, Geogr 4° 00021/01(10,45).



From a Photograph by G. Schumacher.

WESTERN THEATRE UMM QAIS, CIRCULAR VAULT BELOW THE SEATS.

Fig. 3.53. Gottlieb Schumacher, western theater at Umm Qais, *Abila of the Decapolis* (London: Palestine Exploration Fund, 1889), 59.



Fig. 3.54. Gottlieb Schumacher, view of a natural rock bridge at Tell Hamma, *Abila of the Decapolis* (London: Palestine Exploration Fund, 1889), 70.



Fig. 3.55. Baghdad Railway Company, detail view of map depicting Baghdad, c. 1908. DBHI OR1712.

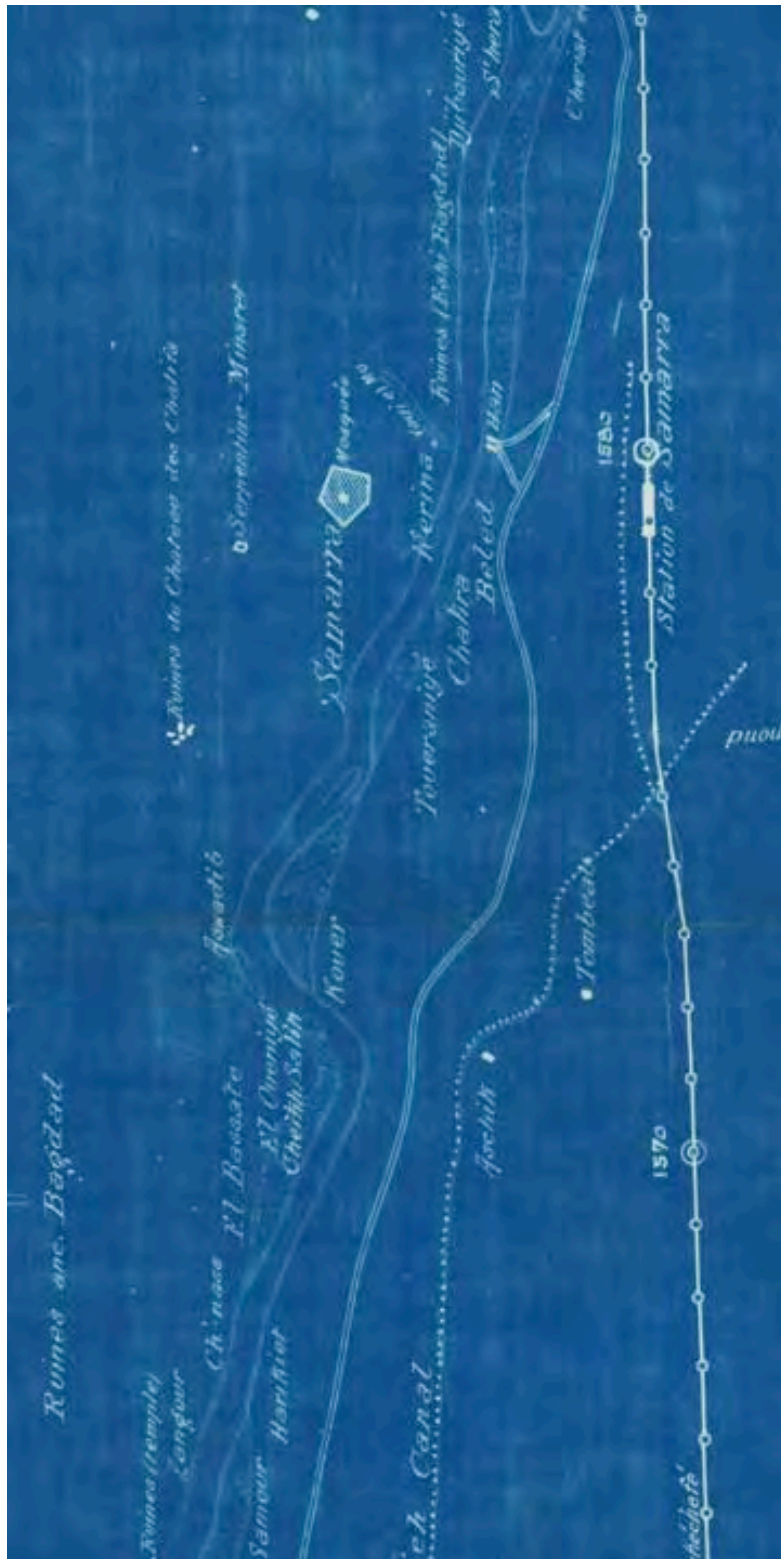


Fig. 3.56. Baghdad Railway Company, detail view of map depicting Samarra, c. 1908. DBHI OR1712.



Fig. 3.57. Karl Auler (“Pasha”), map of the Hejaz Railway with projected line to Mecca, 1906. SPG *Petermann’s Mitteilungen*, Geogr 4° 00022/01(33,154).

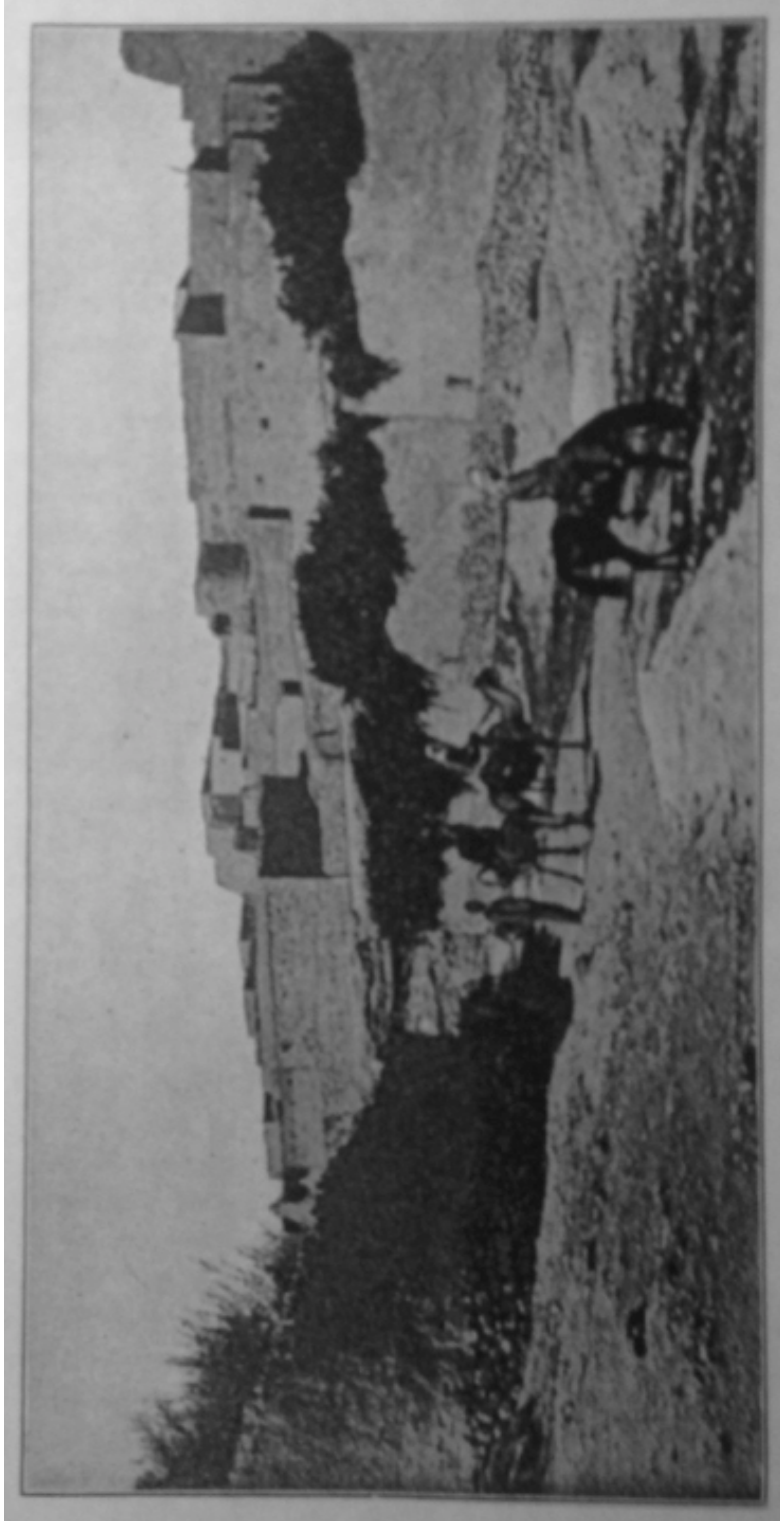


Fig. 3.59. Karl Auler (“Pasha”), view of Ma’an, “Die Hedschasbahn auf Grund einer Besichtigungsgangreise und nach amtlichen Quellen, Teil 1,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 154 (1906). SPG / Universität Erfurt Signatur SPA 4° 000099 (70).

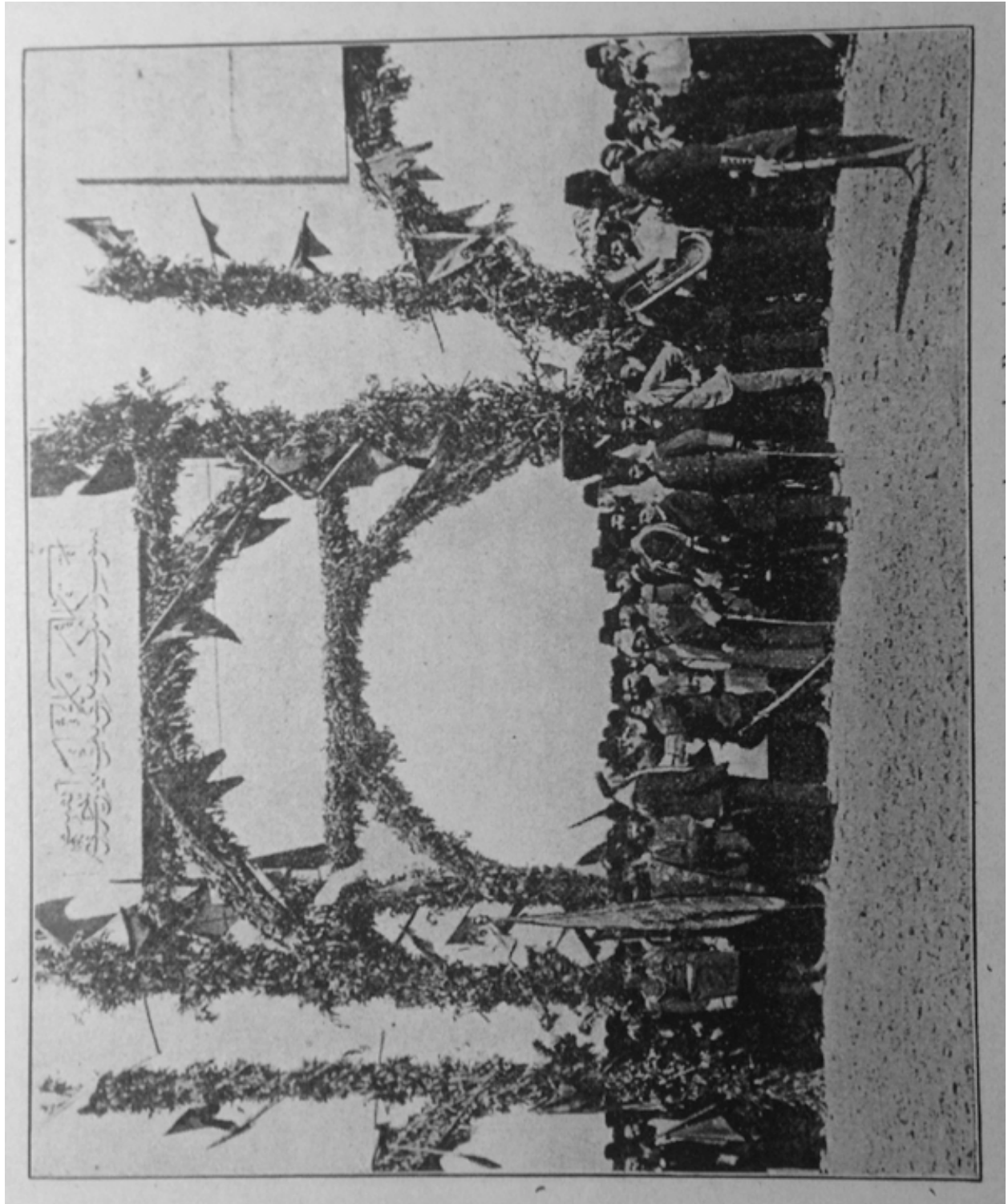


Fig. 3.60. Karl Auler (“Pasha”), view of a medallion ceremony on the Hejaz Railway, “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 1,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 154 (1906). SPG / Universität Erfurt Signatur SPA 4° 000099 (72).

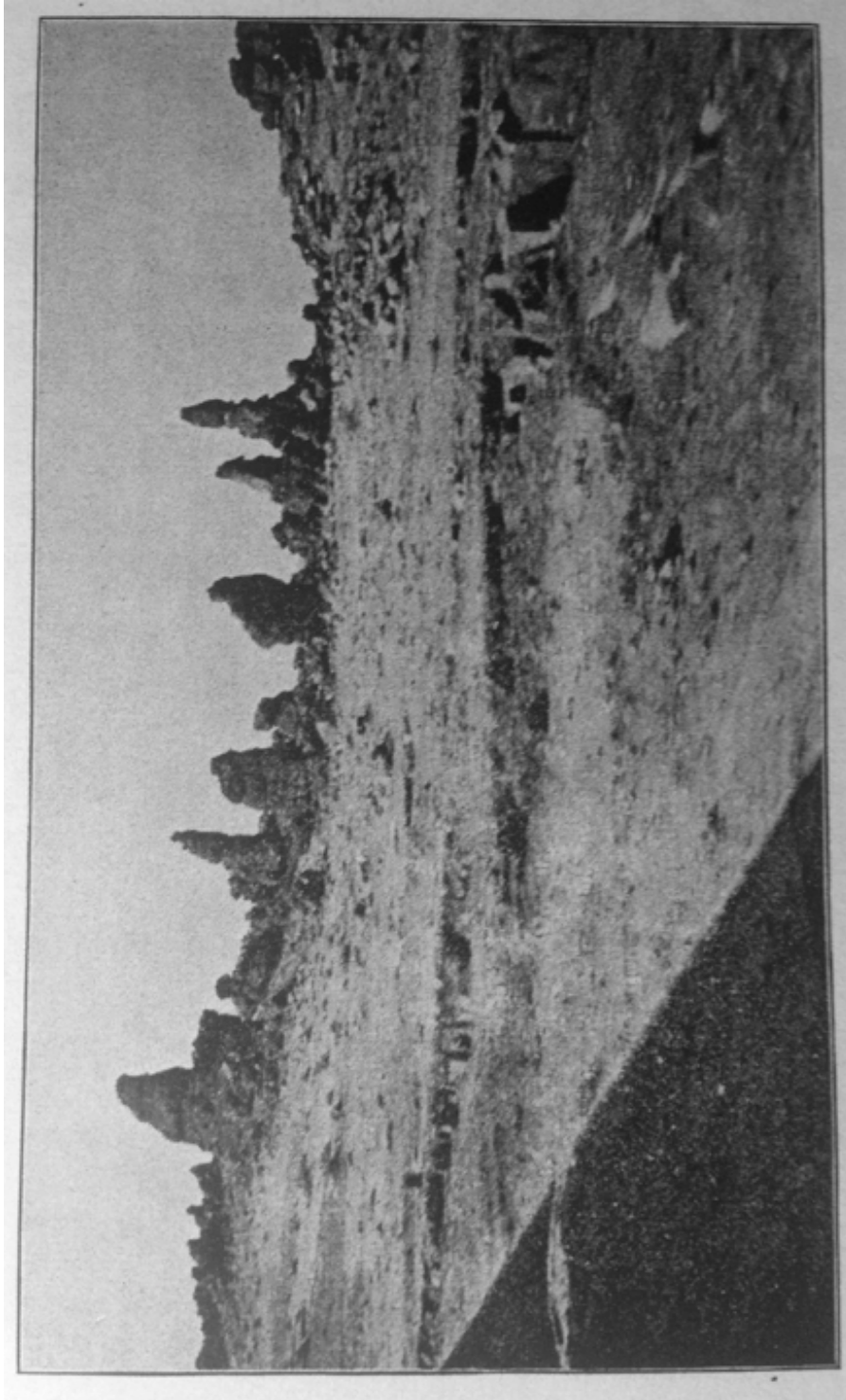


Fig. 3.61. Karl Auler (“Pasha”), view of sandstone structures near ad-Dar al-Hamra, “Die Hed-schasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (Fig. 8).

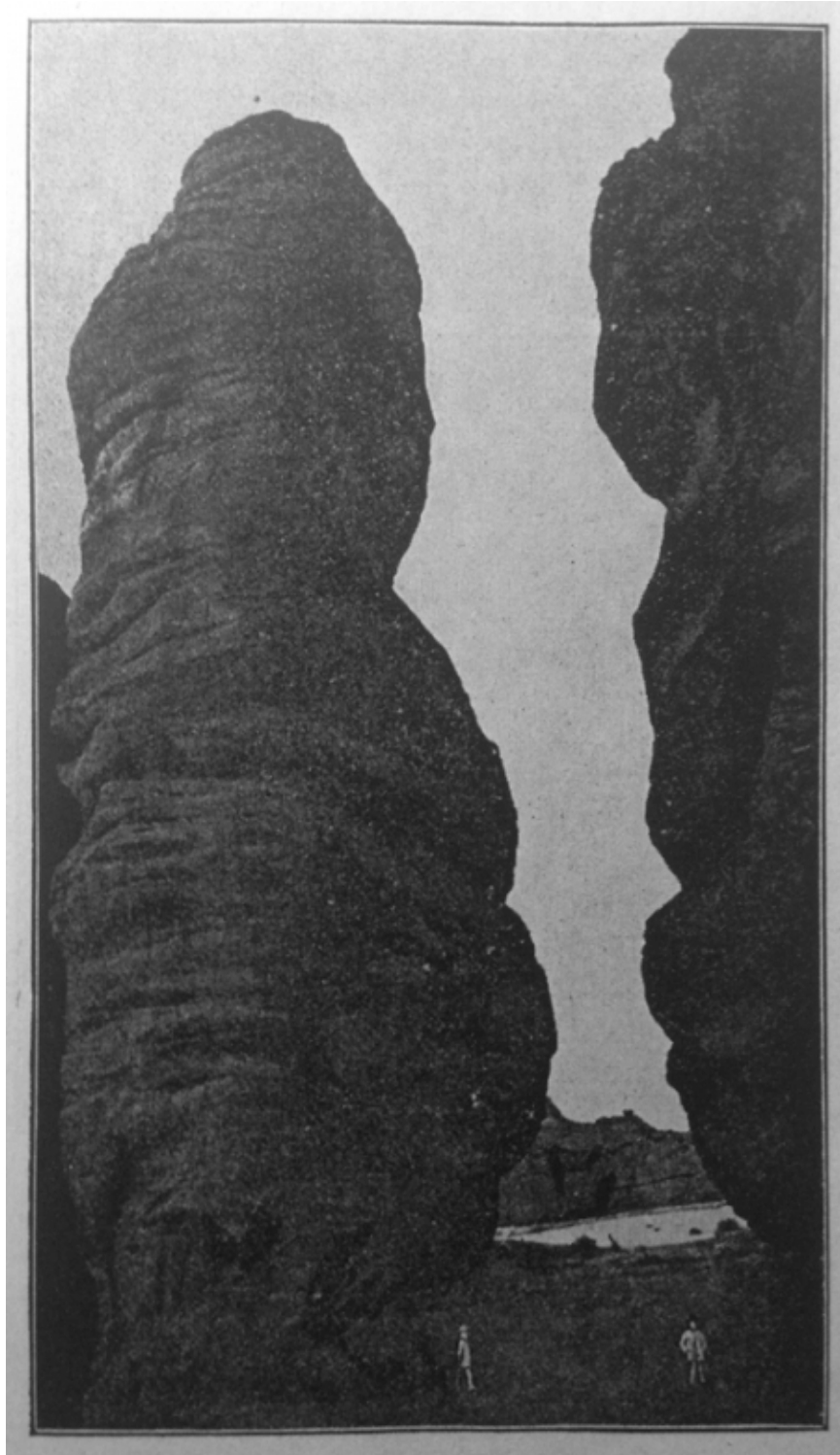


Fig. 3.62. Karl Auler (“Pasha”), rock structure near El Mushim, “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (34).

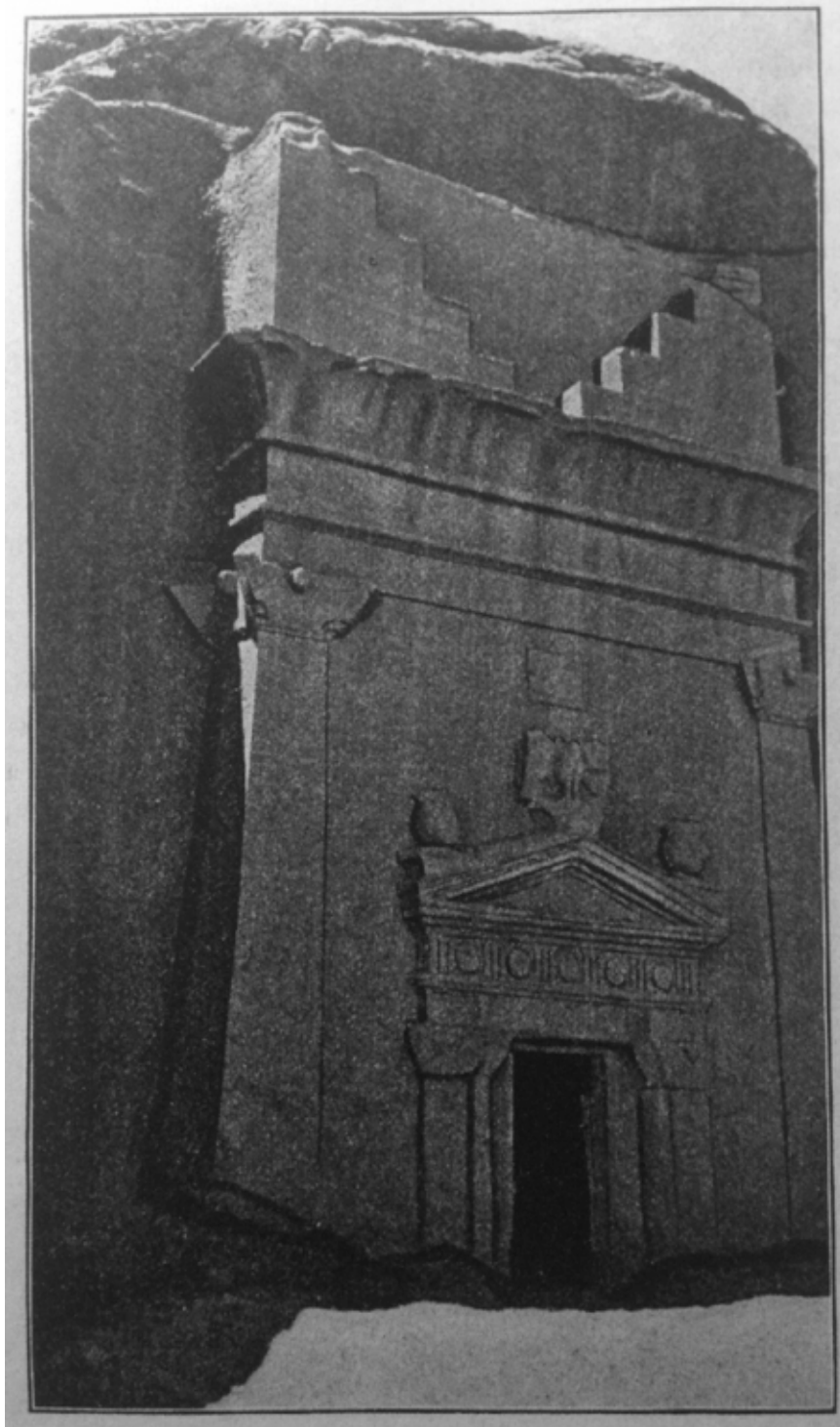


Fig. 3.63. Karl Auler (“Pasha”), antique tomb portal at Meda’ in Saleh, “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (38).

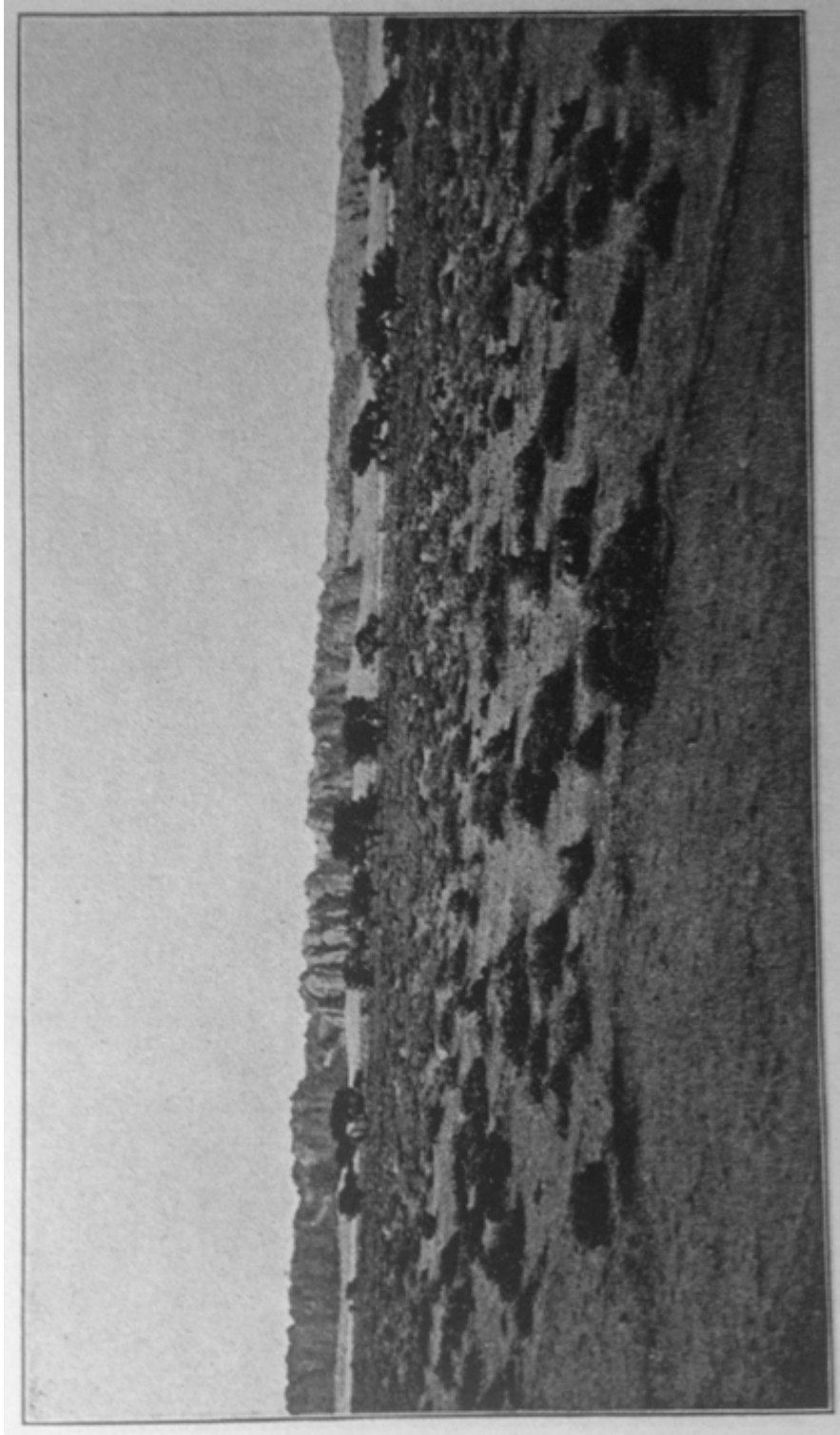


Fig. 3.64. Karl Auler (“Pasha”), shrubbery around Meda’in Saleh, “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (42).



Fig. 3.65. Karl Auler (“Pasha”), palm forests near Ma’an, “Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2,” in: *Dr. A. Petermanns Mitteilungen aus Justus Perthes’ Geographischer Anstalt* 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (48).

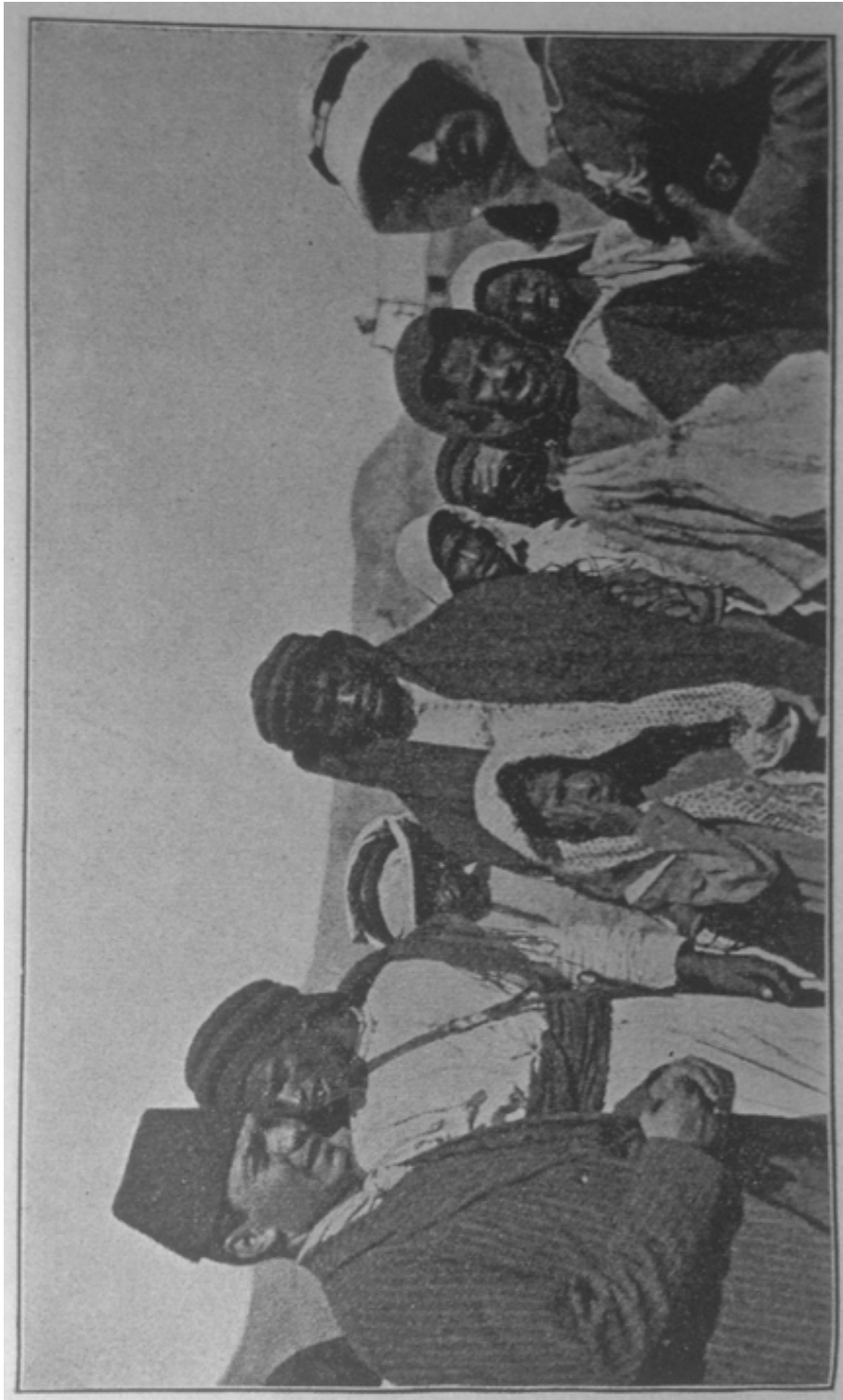


Fig. 3.66. Karl Auler ("Pasha"), bedouins near Ma'an, "Die Hedschasbahn auf Grund einer Besichtigungreise und nach amtlichen Quellen, Teil 2," in: Dr. A. *Petermanns Mitteilungen aus Justus Perthes' Geographischer Anstalt* 161 (1908). SPG / Universität Erfurt Signatur 4° 000099 (49).



Fig. 4.1. Unknown, portrait of Robert Koldewey given to him as a gift in Assos, September 10, 1883. From Reinhard Lullies, Wolfgang Schiering (eds.), *Archäologenbildnisse: Porträts und Kurzbiographien von klassischen Archäologen deutscher Sprache* / Deutsches Archäologisches Institut; mit Beiträgen zahlreicher Fachgenossen (Mainz am Rhein: Zabern, 1988), 116.



Fig. 4.2. Louis-François Cassas, “Personnages dans les Ruines du Temple de Bacchus à Baalbek,” aquarelle, 65 x 90 cm., c. 1820. © Blouin.



Fig. 4.3. James Stuart and Nicholas Revett, depiction of the Hephaisteion, from *Antiquities of Athens* (London, 1762), vol. 3, ch. 1, plate 1.



Fig. 4.4. Unknown, Carl Humann, his family, Alexander Conze and colleagues at Carl Humann's residence in Bergama, c. 1886. As.



Station Beylik-köprü von Westen aus.

VORWORT.

Die in dem vorläufigen Berichte im Archäologischen Anzeiger 1901, S. 1 ff. angekündigte Bearbeitung der Ergebnisse unserer Ausgrabung in Gordion ist durch mancherlei Umstände, namentlich auch die Tätigkeit des ersten der Unterzeichneten für das athenische Institut während des ganzen Sommers 1902, verzögert worden. Andererseits ist nicht nur diese griechische Reise durch Gewinnung wertvollen Materials der vorliegenden Arbeit zugute gekommen, sondern wir hoffen auch, daß diese im allgemeinen durch die Ausdehnung über einen längeren Zeitraum gewonnen hat. Die Vergleichung unseres vorläufigen Berichtes wird erkennen lassen, daß wir seither in nicht wenigen Punkten zu anderen und, wie wir hoffen, richtigeren Anschauungen gelangt sind. Eine auch nur einigermaßen erschöpfende Behandlung aller der Fragen, welche durch unsere Funde berührt werden, hat nicht in unserer Absicht gelegen. Sie hätte noch ausgedehnte Spezialstudien sowohl auf klassischem Boden wie in den großen Museen erfordert und das Erscheinen dieses Berichtes um Jahre hinausgerückt. Die Wissenschaft hat aber unseres Erachtens ein Recht darauf, daß ihr neues Material nicht allzulange vorenthalten werde. Wir bieten ihr das von uns gefundene in gewissenhafter Verarbeitung mit den für uns zurzeit erreichbaren Hilfsmitteln. Über den äußeren Gang unserer Unternehmung ist kurz folgendes zu berichten.

Schon einige Monate vor unserer Abreise von Deutschland war unser Gesuch um einen Ausgrabungsferman durch Vermittlung des Auswärtigen Amts und der Kaiserlichen Botschaft in Konstantinopel bei der türkischen Regierung eingereicht worden. Der um alle archäologischen Unternehmungen im Ottomanischen Reiche so hochverdiente Direktor des Konstantinopler Museums Exzellenz Hamdy-Bey schenkte unserm Plane das freundlichste Entgegenkommen, wie er denn in Gemeinschaft mit seinem Bruder Dr. Halil Edhem-Bey in allen Stadien unserer Unternehmung deren wohlwollender und verständnisvoller Förderer gewesen ist.

Fig. 4.5. Foreword page, Gustav Körte and Alfred Körte, *Ergebnisse der Ausgrabung im Jahre 1900* (Berlin: Georg Reimer, 1904), vii.

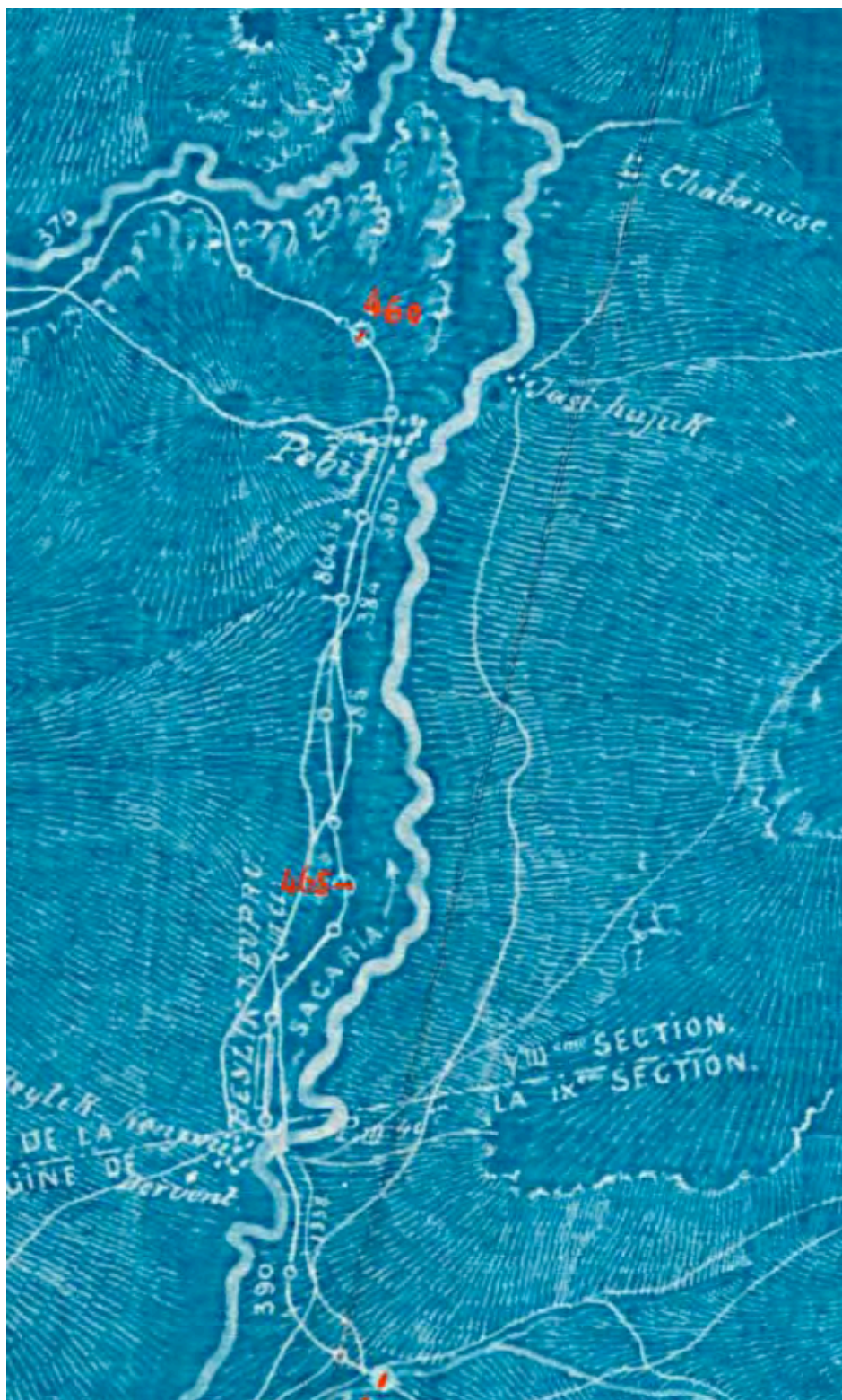
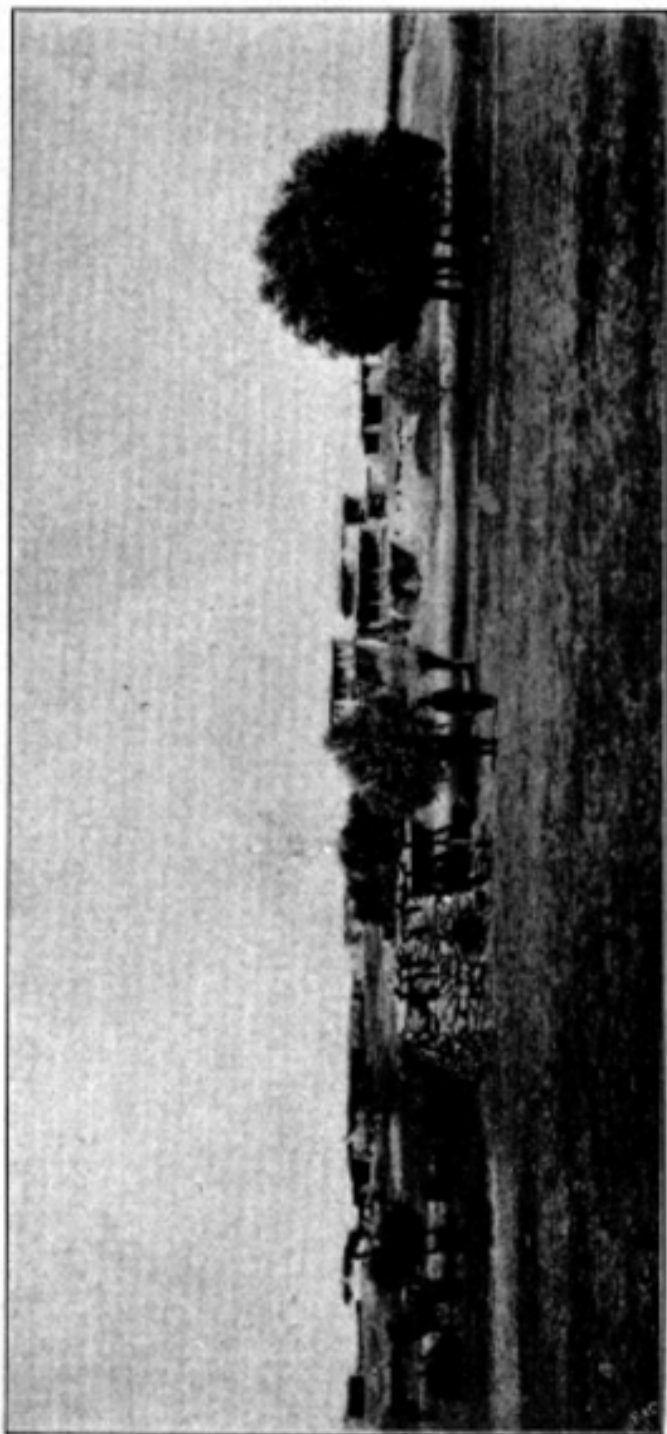


Fig. 4.6: Detail of railway trace map showing Gordium and environs on the Eskişehir-Angora line. DBHI OR 370.



Dorf Pebi vom rechten Ufer des Sakaria aus, im Vordergrund als Café dienende Steinhütte.

Fig. 4.8. Plate from Gustav Körte and Alfred Körte, *Ergebnisse der Ausgrabung im Jahre 1900* (Berlin: Georg Reimer, 1904), i.



Fig. 4.9. Unknown photographer from the Deutsches Archäologisches Institute, Athens division, view of excavation of Tumulus B at Gordium, c. 1900. DAII fotothek R 35.836.



Fig. 4.10. Guillaume Gustave Berggren, view of the column of Emperor Augustus at Ankara, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 9.



Fig. 4.11. Guillaume Gustave Berggren, view of the Konya tower kiosk, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 7.



Fig. 4.12. Guillaume Gustave Berggren, view of İnce Minareli Madrasa, Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 7.

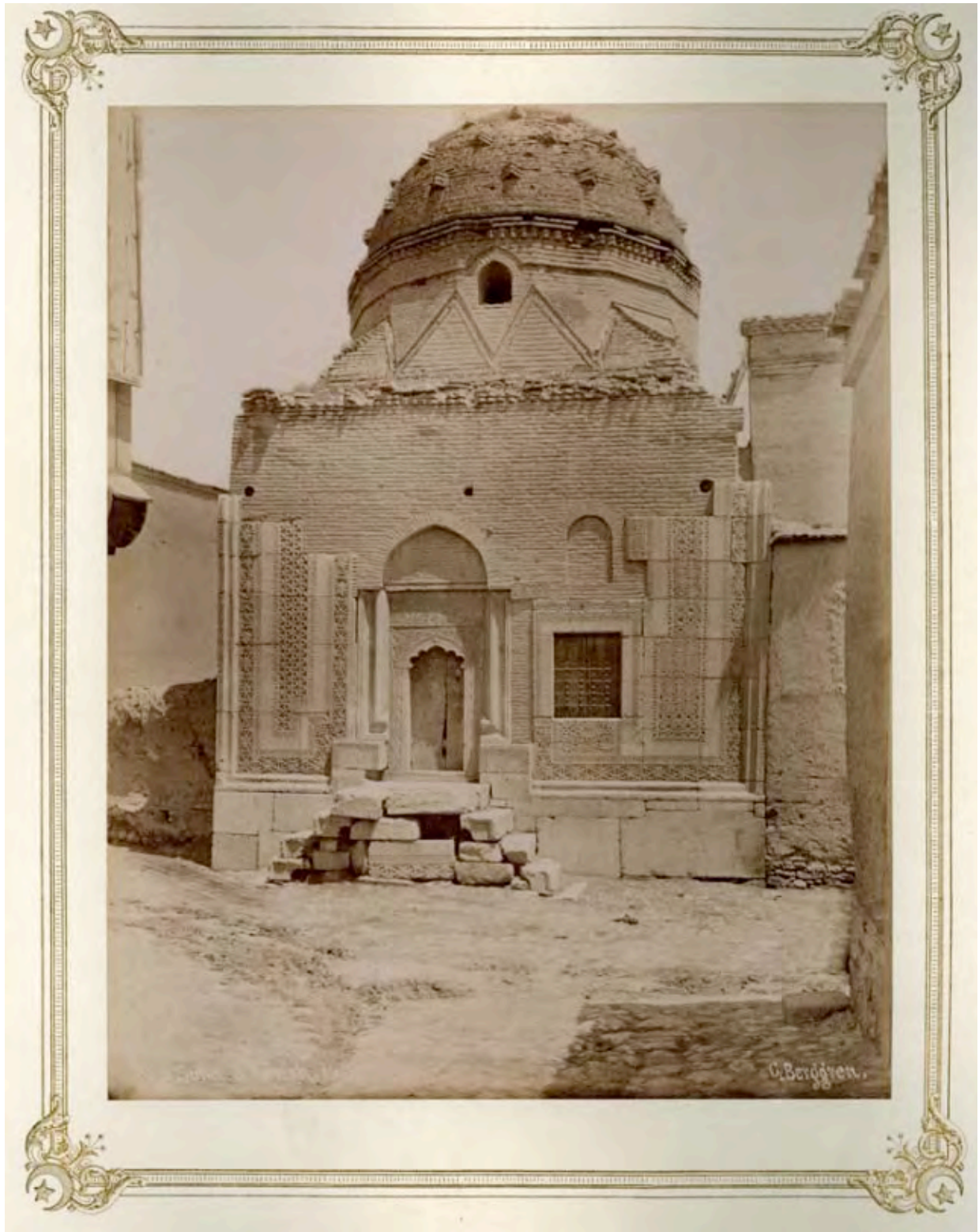


Fig. 4.13. Guillaume Gustave Berggren, view of “Aya Sofia,” Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 7.



Fig. 4.14. Guillaume Gustave Berggren, view of Phrygian statues at Kal-Khane, near Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.



Fig. 4.15. Guillaume Gustave Berggren, Phrygian and classical sculptural reliefs at the old Bedestan, Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.



Fig. 4.16. Guillaume Gustave Berggren, view of Sultan Han, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.



Fig. 4.17. Guillaume Gustave Berggren, Midas monument at Yazılıkaya near Eskişehir, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.



Fig. 4.18. Ernest Breton, “Tombeau de Midas” from *Monuments de tous les Peuples* (Brussels: Librairie Historique-Artistique, 1843) tome I, plate XLV.



Fig. 4.19. Guillaume Gustave Berggren, an unidentified man and three boys at the Phrygian acropolis at Yazılıkaya near Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.



Fig. 4.20. Guillaume Gustave Berggren, view of man aside Phrygian ruins near Hamam, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 II.



Fig. 4.22. Felix von Luschan, images of Armenian men from Eugen Petersen and Felix von Luschan (eds.), *Reisen in Lykien Milyas und Kibyratis* (Vienna: Carl Gerold, 1889), plate XXXIV.

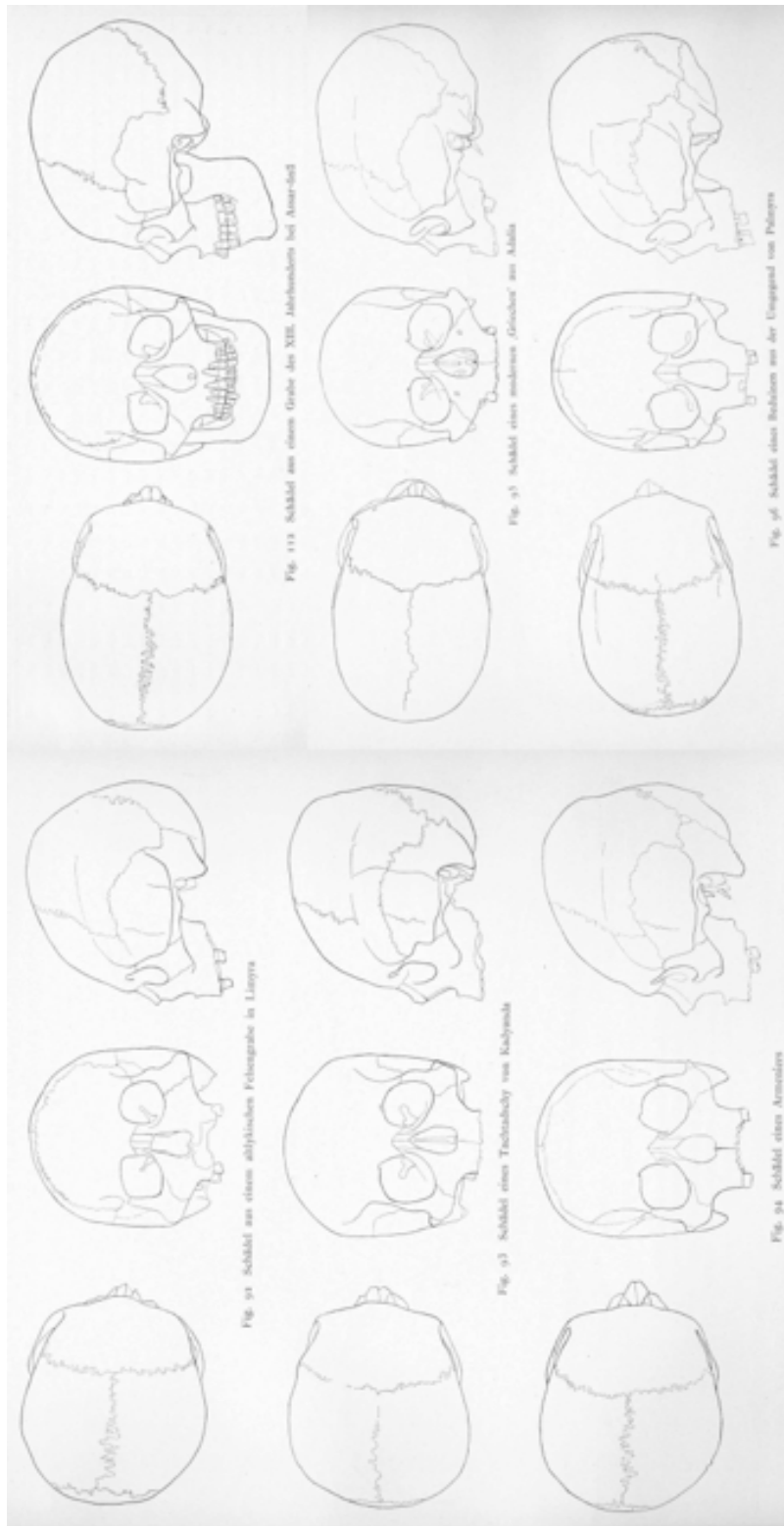


Fig. 4.23. Felix von Luschan, comparison of human skulls from various ethnic groups from the Zincirli region from Eugen Petersen and Felix von Luschan, eds., *Reisen in Lykien Milyas und Kibyratis* (Vienna: Carl Gerold, 1889), figs. 92-96, 112.



Fig. 4.24. Unknown, Felix von Luschan with workmen in front of the discovery of two double-sphinx column bases from the portico of an Iron Age palace on the upper mound of Sam'al. The railway station can be seen in the distant background. Photograph: University of Chicago Libraries.



Fig. 4.25. Female head types in bronze sculptures from Benin from Felix von Luschan, *Die Altertümer von Benin* (Berlin and Leipzig: Vereinigung wissenschaftlicher Verleger Walter de Gruyter & Co., 1919), plate 54.

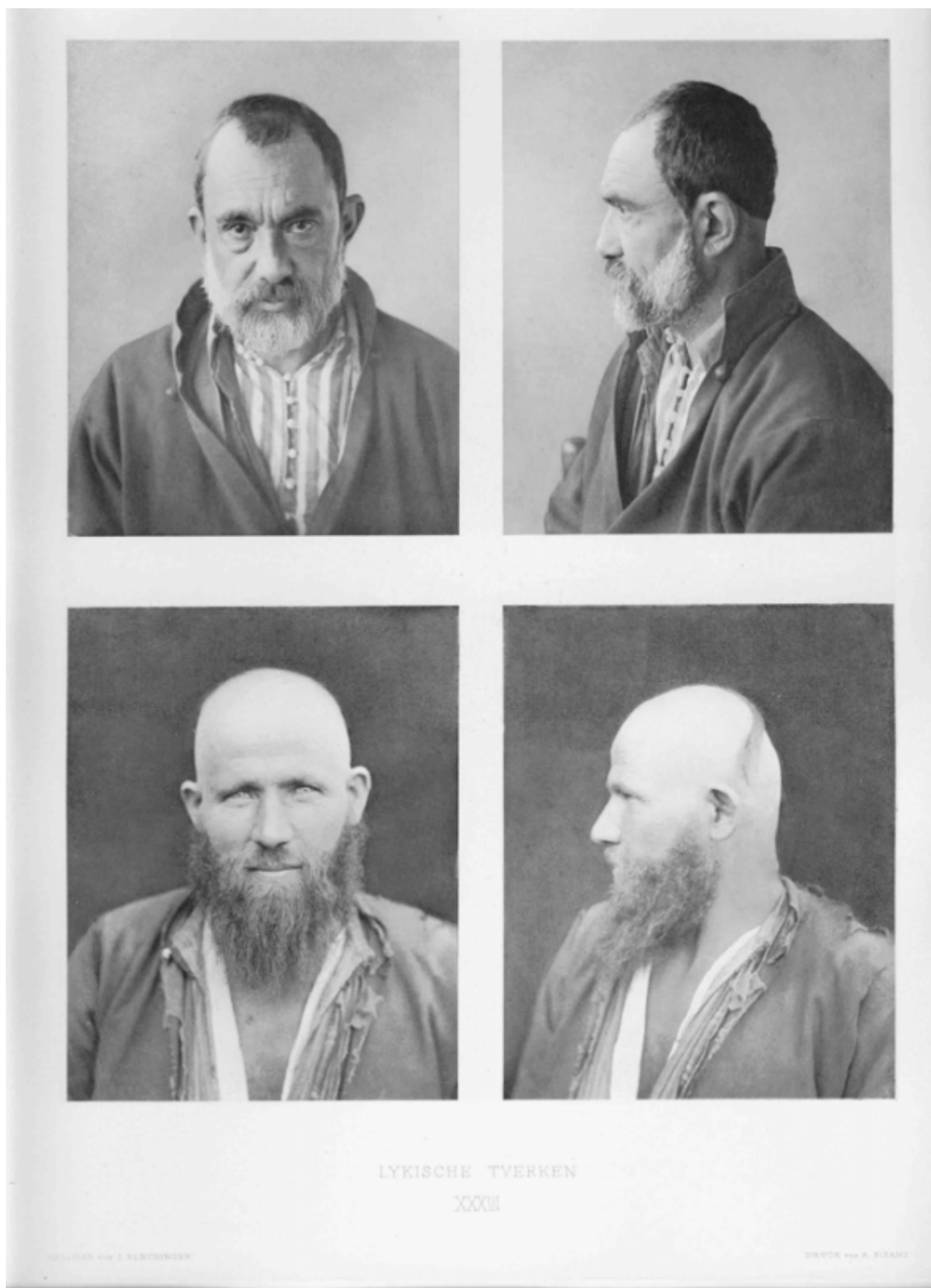


Fig. 4.26: Felix von Luschan, images of Lycian Turks from Eugen Petersen and Felix von Luschan, eds., *Reisen in Lykien Milyas und Kibyratıs* (Vienna: Carl Gerold, 1889), plate XXXVI.

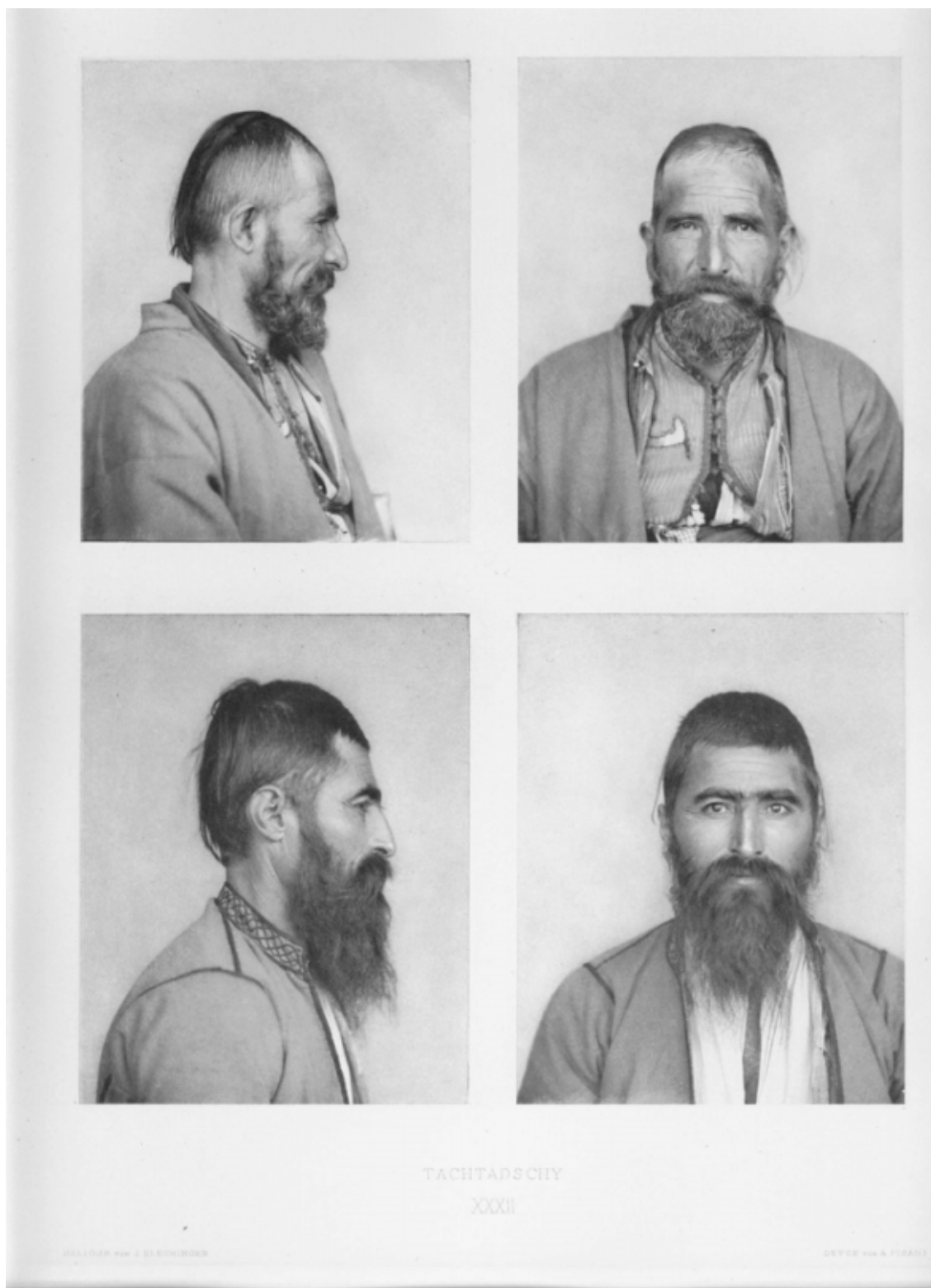


Fig. 4.27. Felix von Luschan, images of Turkic men from Eugen Petersen and Felix von Luschan, eds., *Reisen in Lykien Milyas und Kibyratıs* (Vienna: Carl Gerold, 1889), plate XXXII.

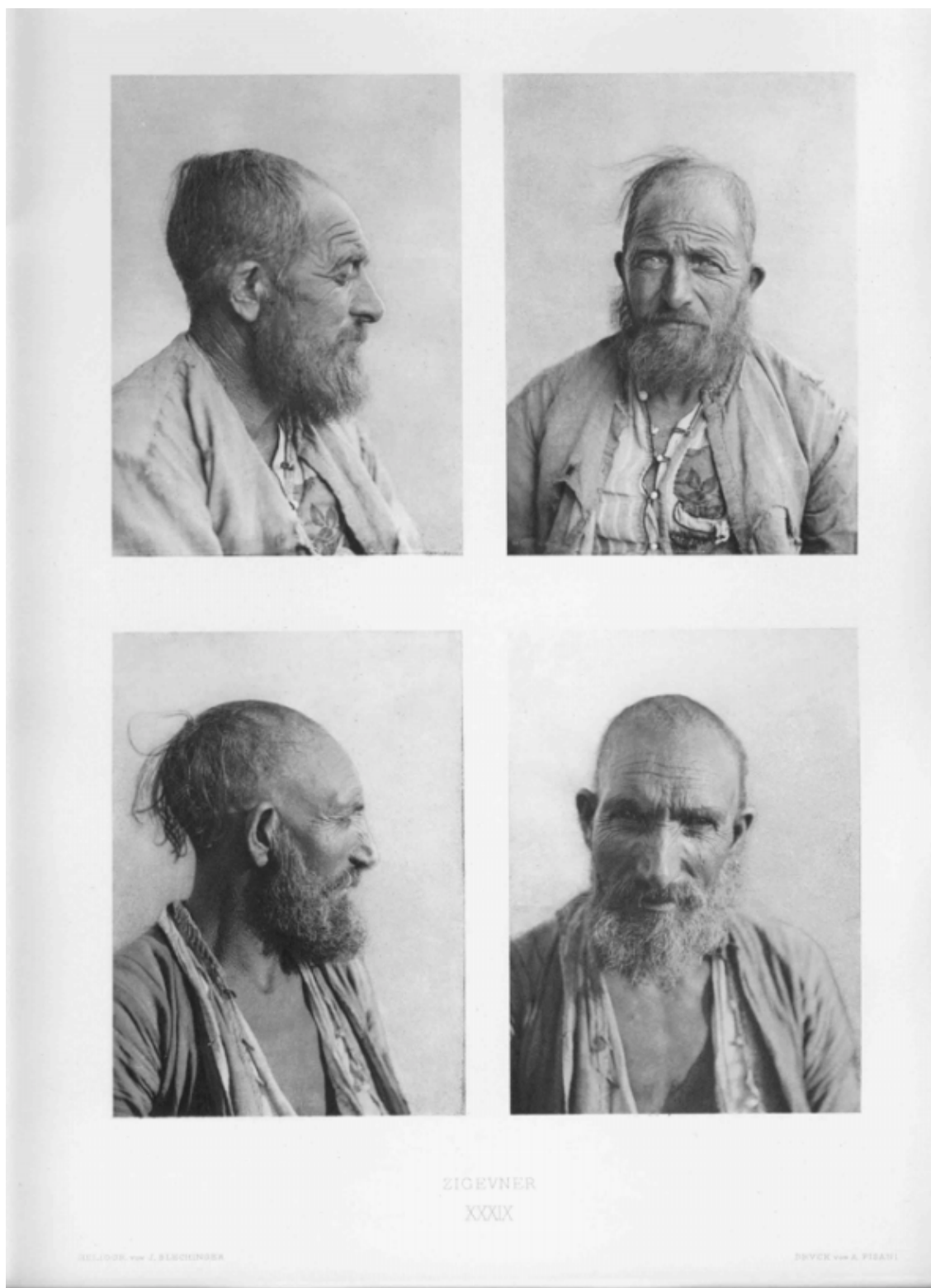


Fig. 4.28. Felix von Luschan, images of gypsy (Roma) men from Eugen Petersen and Felix von Luschan, eds., *Reisen in Lykien Milyas und Kibyrtis* (Vienna: Carl Gerold, 1889), plate XXXIX.

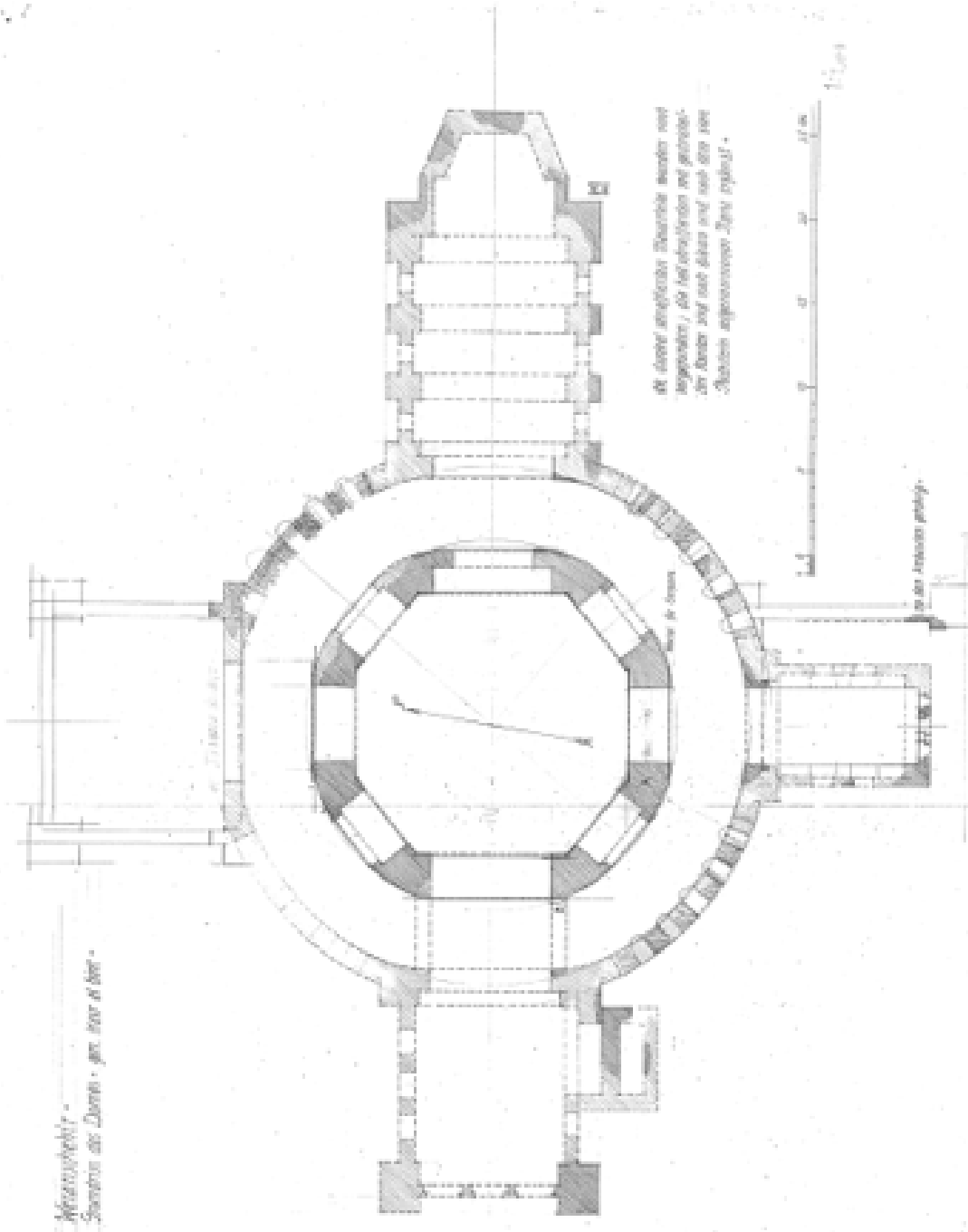


Fig. 4.29. Max Von Oppenheim, plan of an Armenian church at Viranşehir, c. 1900. SOHA Von Oppenheim Nachlass, Nr. 100.



Fig. 4.30. Max Von Oppenheim, details of an Armenian church at Viranşehir, c. 1900. SOHA Von Oppenheim Nachlass, Nr. 100.



Fig. 4.32. Detail of railway trace map showing Tell Halaf and environs on the Baghdad Railway line. DBHI OR 1716.



Fig. 4.33. Unknown, the photo studio at the Tell Halaf expedition house. SOHa Fotosammlung Max von Oppenheim Bildsignatur 783.

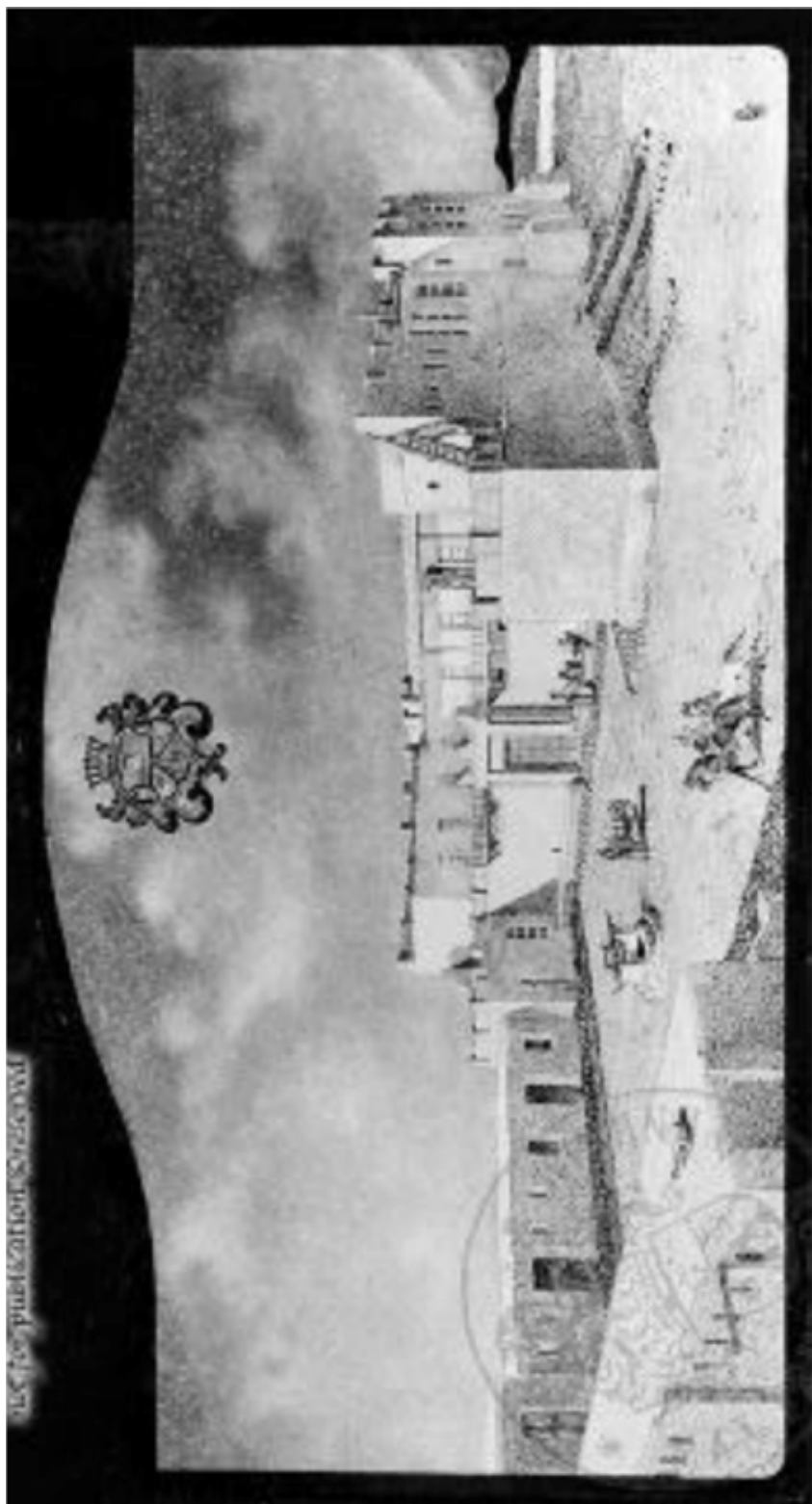


Fig. 4.35. Unknown, view of the expedition house at Tell Halaf. SOHa Fotosammlung Max von Oppenheim 7400.



Fig. 4.35: Unknown, Baghdad Railway engineers outside a tent at Hammam Ali, c. 1911. SOHa Fotosammlung Max von Oppenheim 5062.



Fig. 4.36. Unknown, Baghdad Railway in front of the Tekttek Mountains, 1913. SOHa Fotosammlung Max von Oppenheim 2435.



Fig. 4.37. Unknown, Baghdad Railway engineers gathered in a tent at Djirdjib, c. 1916. SOHa Fotosammlung Max von Oppenheim 4566.



Fig. 4.38. Unknown, view of the expedition house at Tell Half, c. 1911. SOHa Fotosammlung Max von Oppenheim 4611.

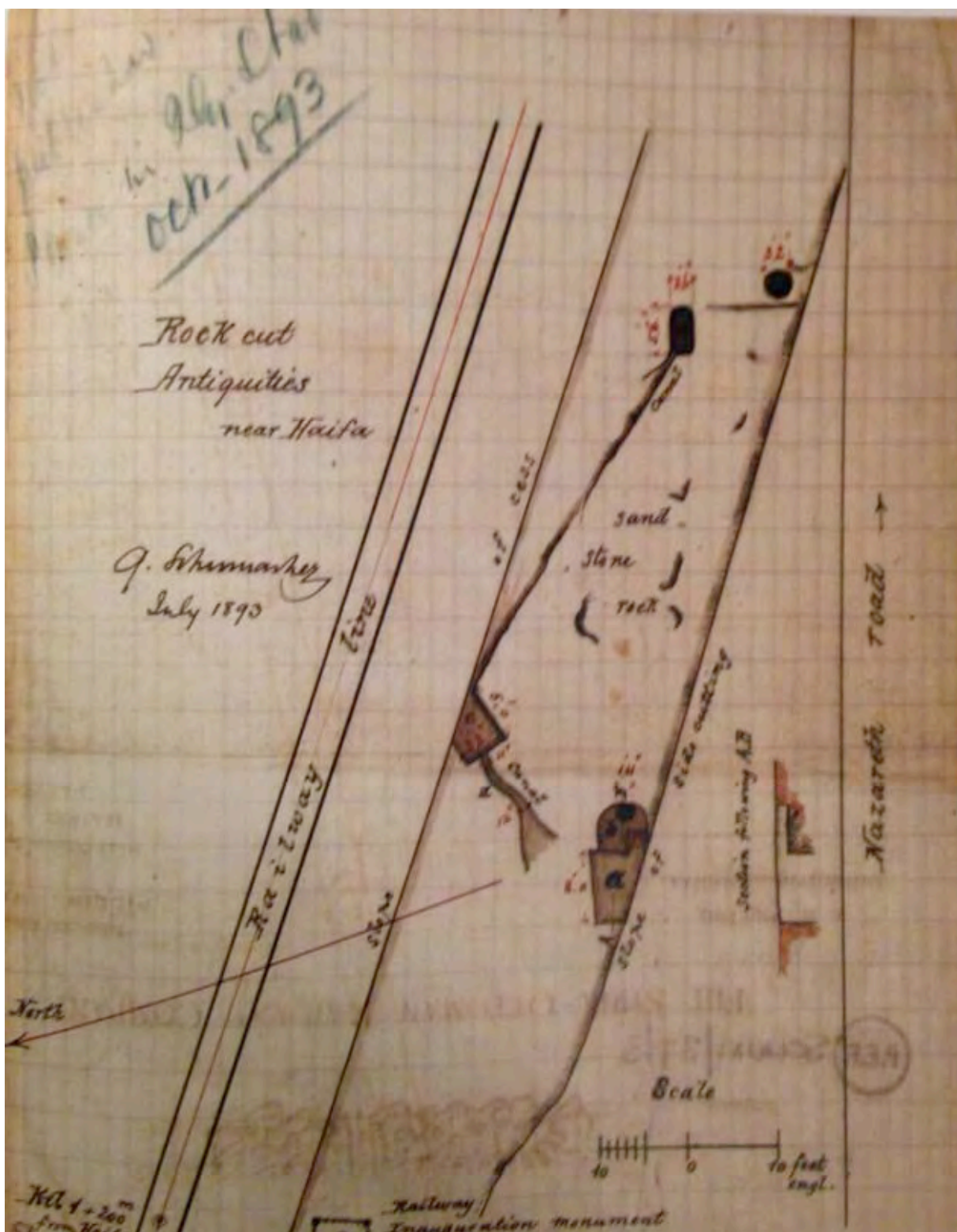


Fig. 4.39. Gottlieb Schumacher, Sketch of Tell Meggido, the rail branch to Haifa and environs, 1893. PEF DA-SHCUM-37.3.



Fig. 4.40. Unknown, possibly Bruno Schulz, view of initial fieldwork at Mshatta, c. 1907. MIK 811-1.

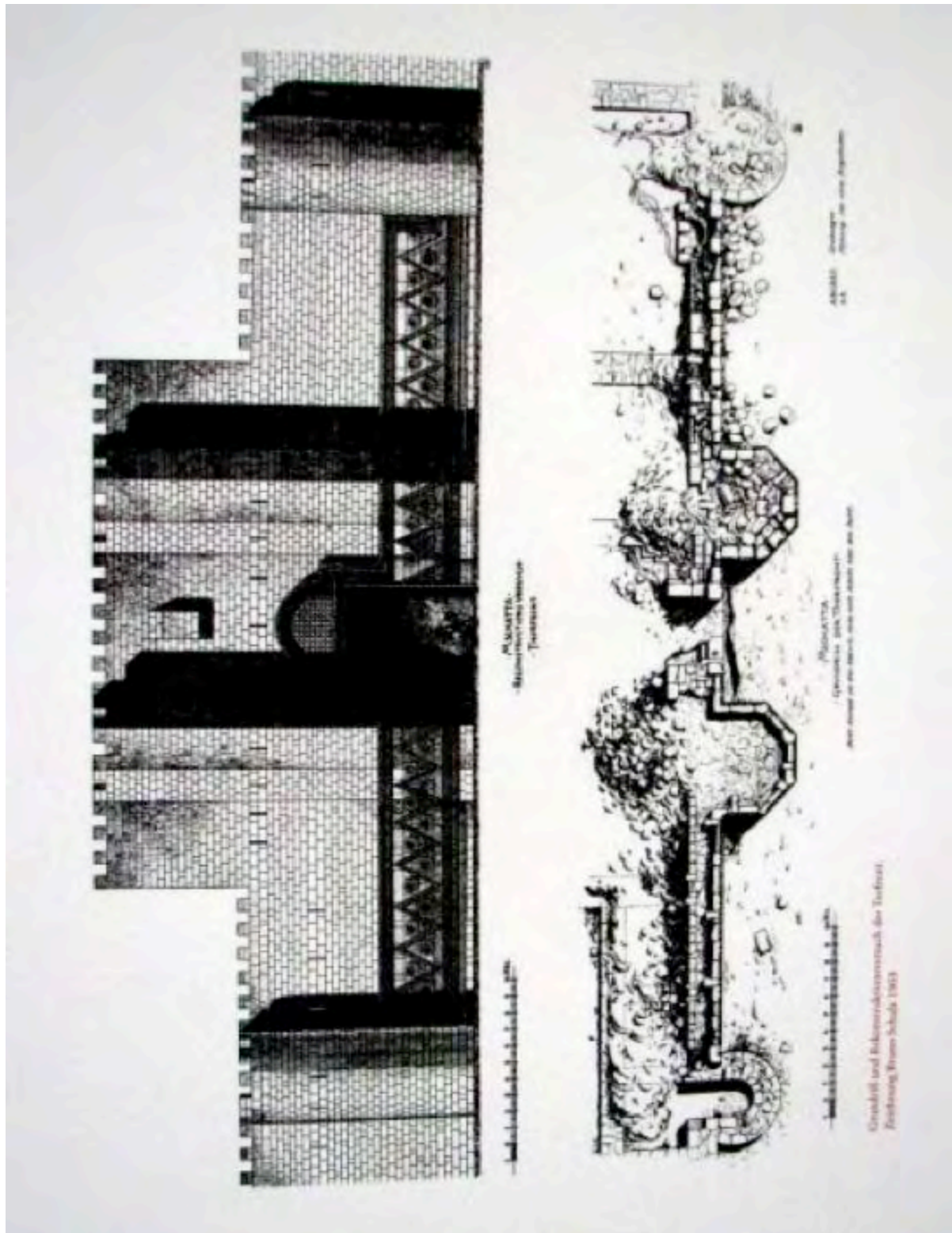


Fig. 4.41. Bruno Schulz, plan and elevation of Mshatta, 1903. SMPK ZA 2.11.



Fig. 4.42. Gottlieb Schumacher [attributed], Hand-drawn map of the Hejaz Railway and the location of the Mshatta Façade, noting possible transportation routes, 1902. SMPK I/IM 6. Note: the initials “JE” appear in the bottom right hand corner which may indicate a connection to Julius Euting.



Fig. 4.44. Unknown, Gertrude Bell visiting with German archaeologists at Assur, April 1909. NUSC Gertrude Bell photographs collection, Q225.

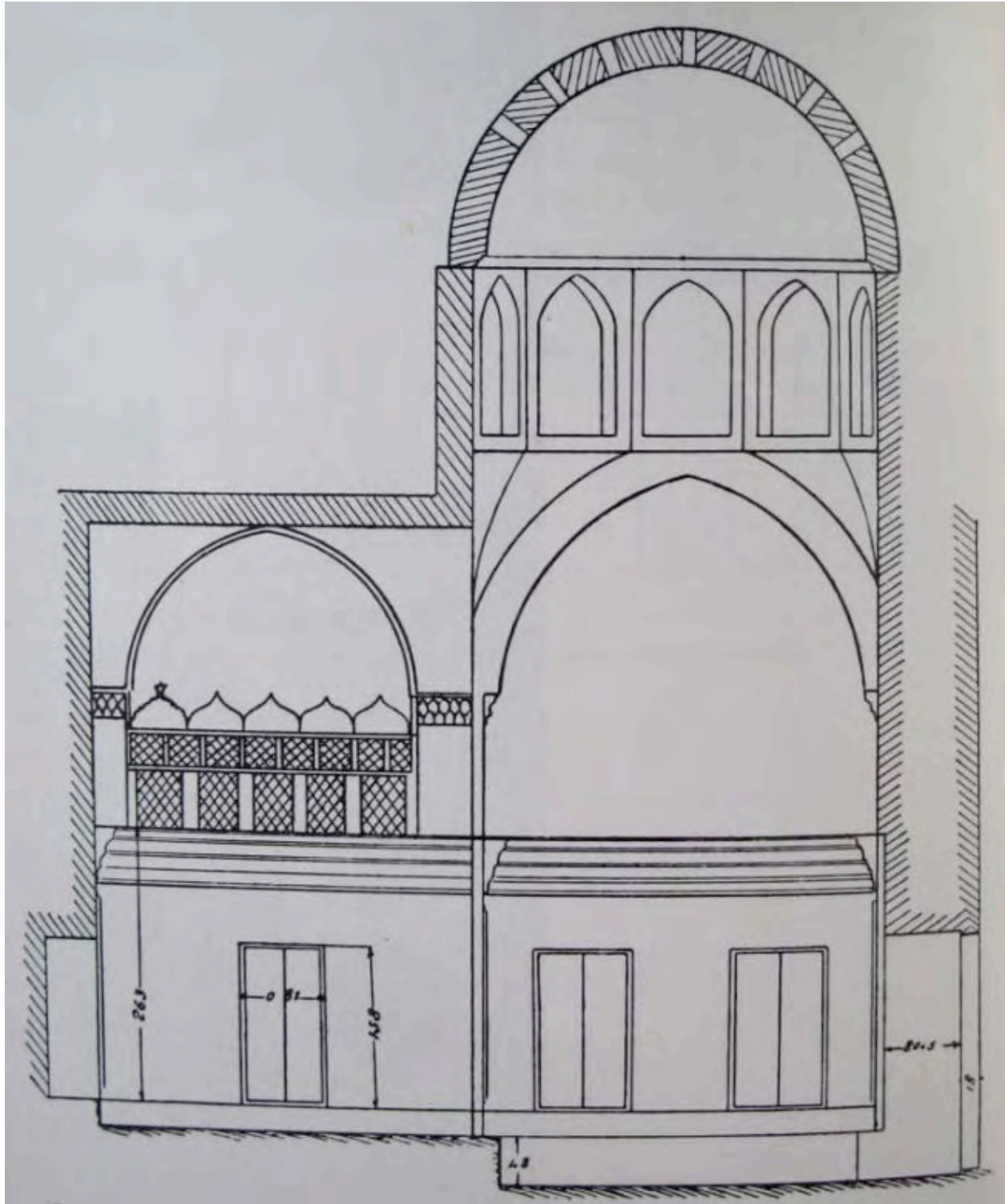


Fig. 4.45. H. Foellner (Chief Engineer of the Baghdad Railway), drawing of the Aleppo Room, excerpted from Julia Gonella, *Ein-christlich-orientalisches Wohnhaus des 17. Jahrhunderts aus Aleppo (Syrien). Das 'Aleppo-Zimmer' im Museum für Islamische Kunst* (Berlin: Staatliche Museen zu Berlin – Preußischer Kulturbesitz, 1996), plate 21.



Fig. 4.46. Staatliche Museen zu Berlin, View of the Aleppo Room in situ. SMPK ZA 2.11/3321.



Fig. 4.47. Unknown, possibly Ernst Herzfeld, view of excavation camp at Samarra, c. 1912.
SIFSG accession no. FSA A.6 04.20.171.



Fig. 4.48. Unknown, possibly Ernst Herzfeld, view of Samarra, c. 1912. SIFSG accession no. FSA A.6 04.23.064.

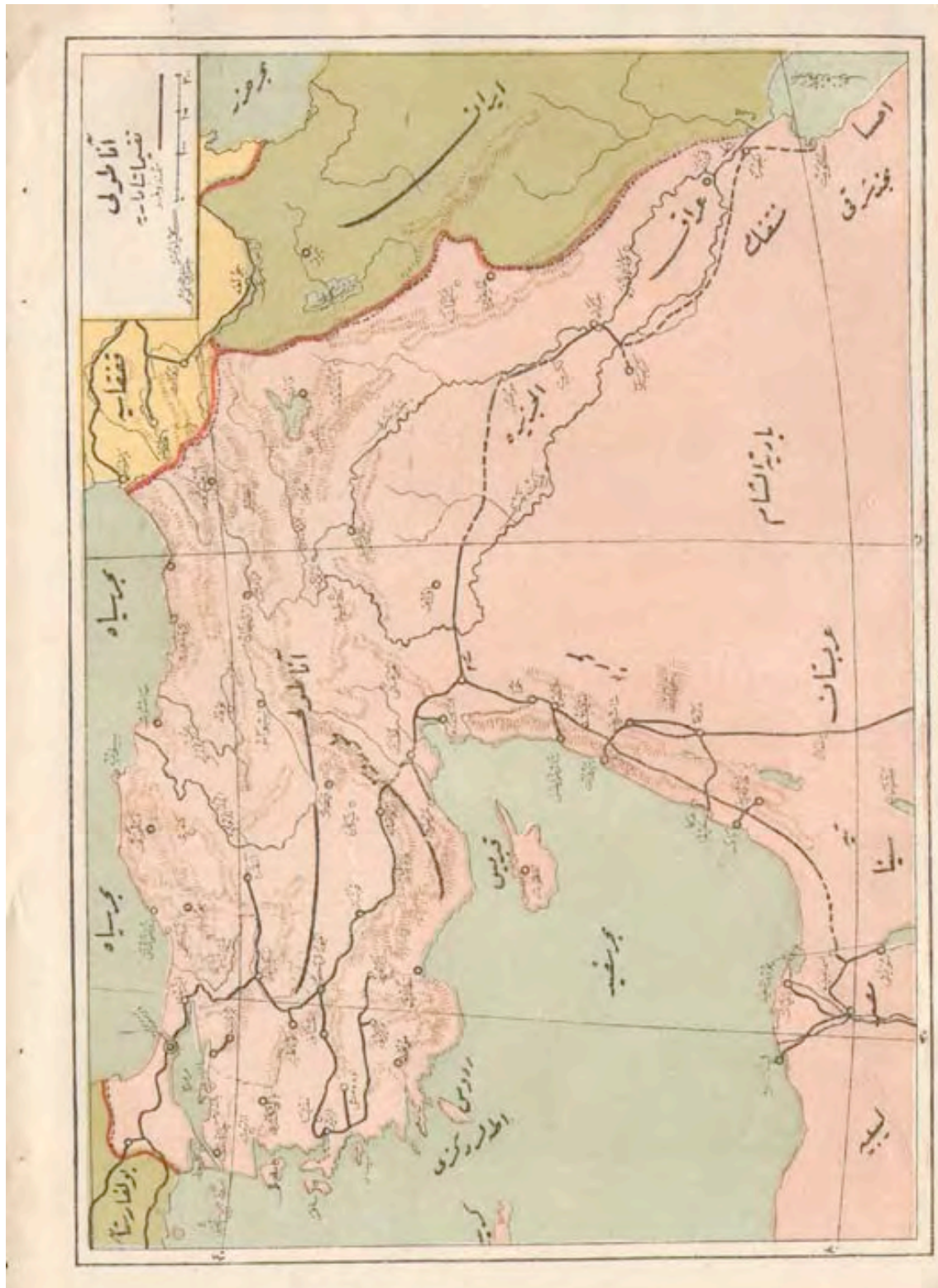


Fig. 5.1. Ottoman railway network map, c. 1914. AK Htr Gec 00063.



Fig. 5.2. Unknown, Hejaz Railway laborers, 1903. Wikimedia Commons.



Fig. 5.3. Paul Zepdji, Balkan railway labor force in front of unidentified station (detail), c. 1894.
NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.



Fig. 5.4. American Colony Jerusalem, young Arab stoneworkers on the Baghdad Railway east of Aleppo, c. 1910. LOC LC-M32-13795.



Fig. 5.5. American Colony Jerusalem, woodworkers on the Baghdad Railway east of Aleppo, c. 1910. LOC LC-M32-13787.



Fig. 5.6. A railway bridge structure north of Belemelik completed in two phases, partly in stone and partly in concrete. Photograph of the author.

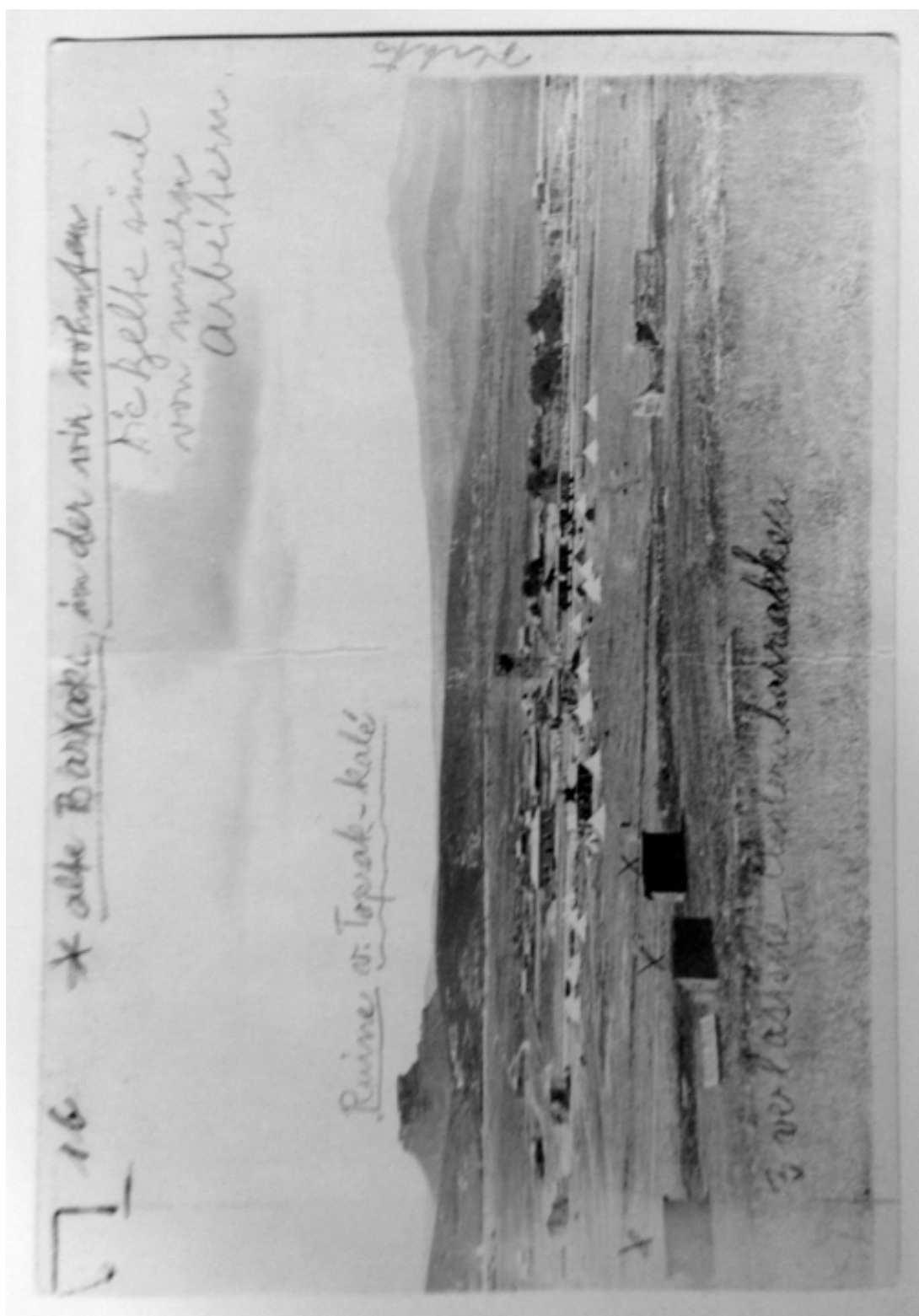


Fig. 5.7. Emil Heubusch, photograph with written annotations noting the quarantined barracks for workers stricken with cholera at Toprakkale, 1913. SAS.



Fig. 5.8. Unknown, tent camp near the Taurus Mountains for the construction of the Baghdad railway, c. 1918. DAII fotothek 26.602. ©DAI.



Fig. 5.9. Varda viaduct, view from north. Photograph of the author.

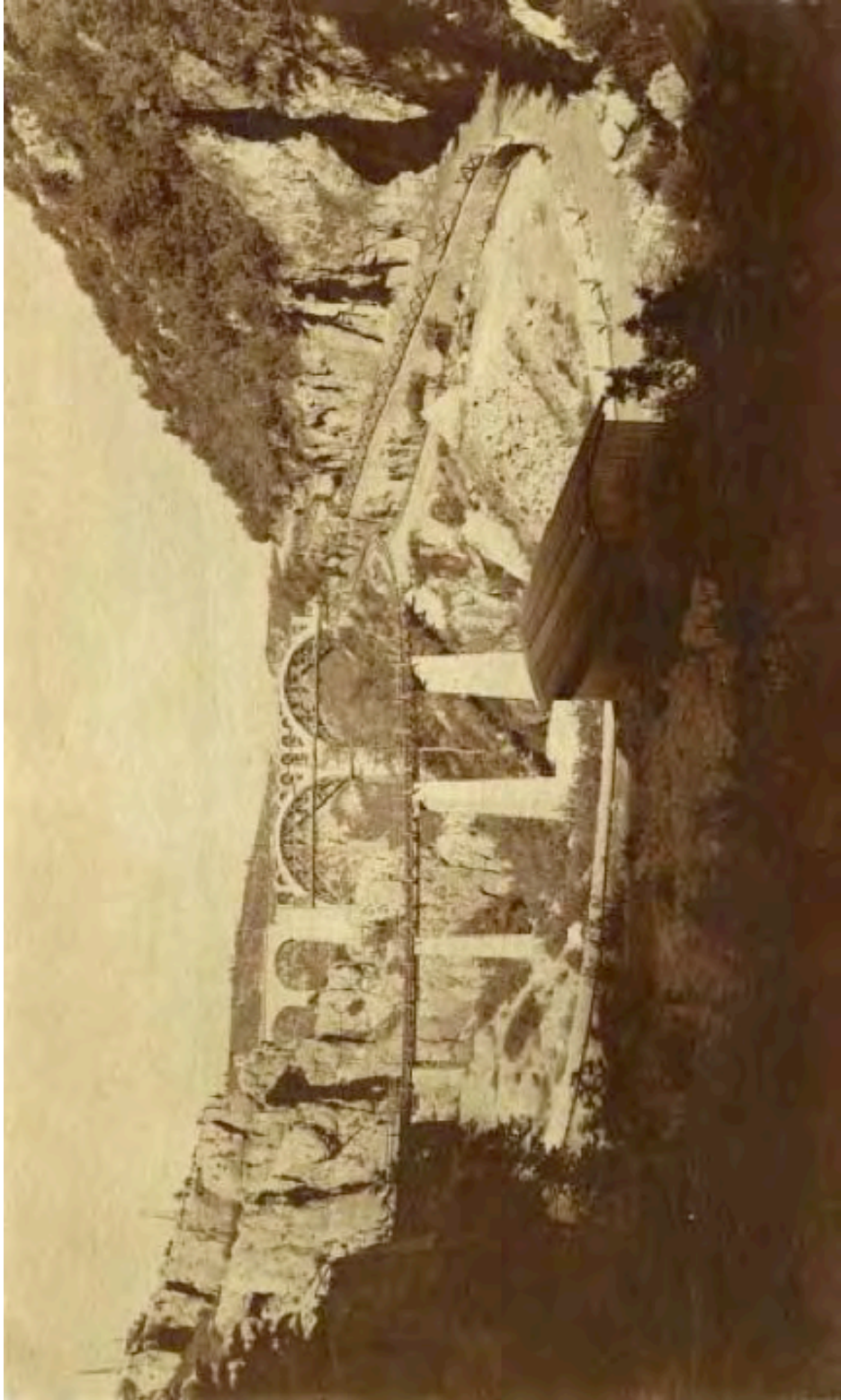


Fig. 5.10. Unknown, auxiliary bridge and the Varda viaduct, c. 1915. Courtesy Gunter Hartnagel.

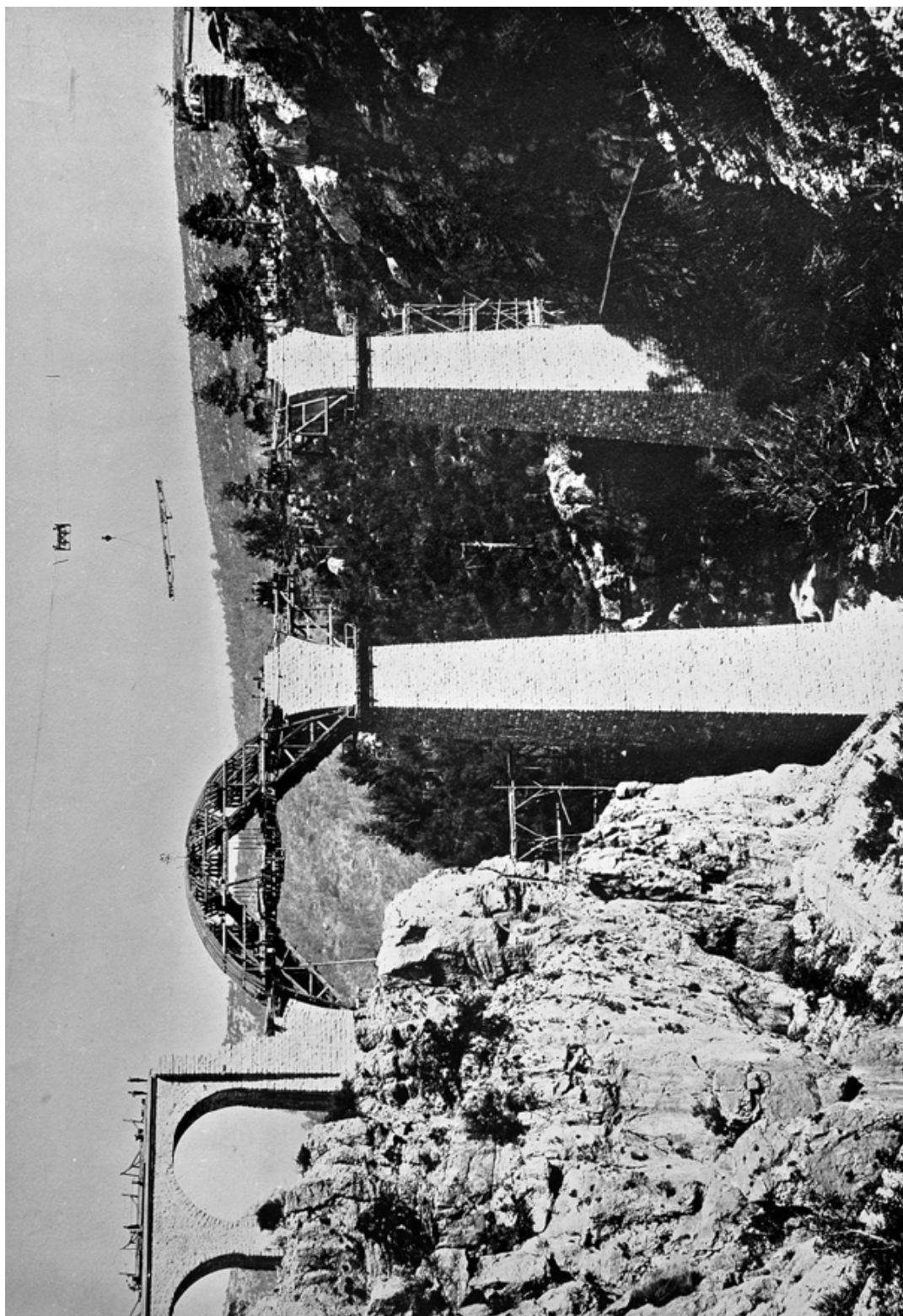


Fig. 5.11. Unknown, view of the construction of the Varda viaduct, c. 1910. BKa bs-d 2001.

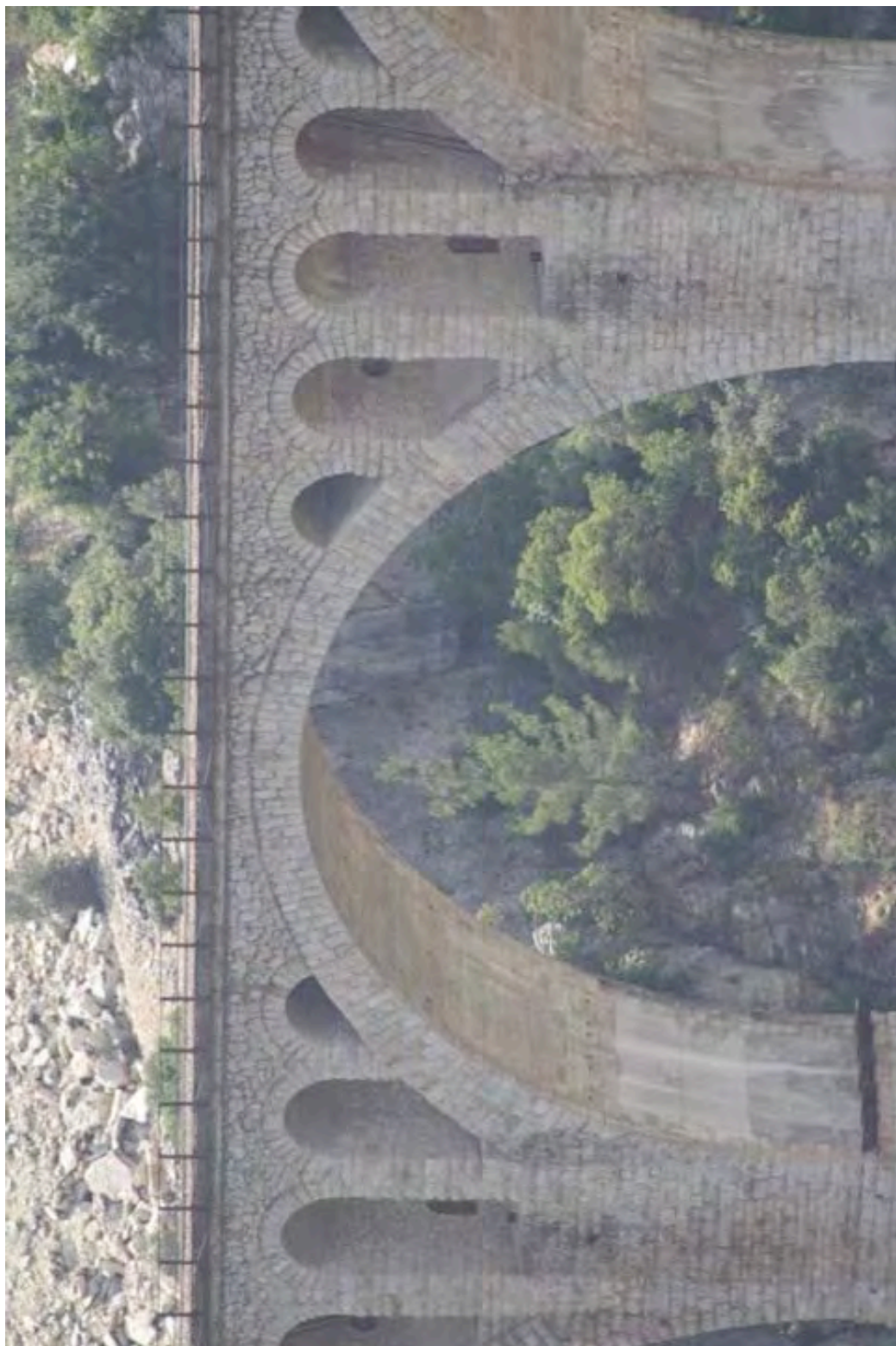


Fig. 5.12. Detail view of central span of the Varda viaduct from southwest. Photograph of the author.

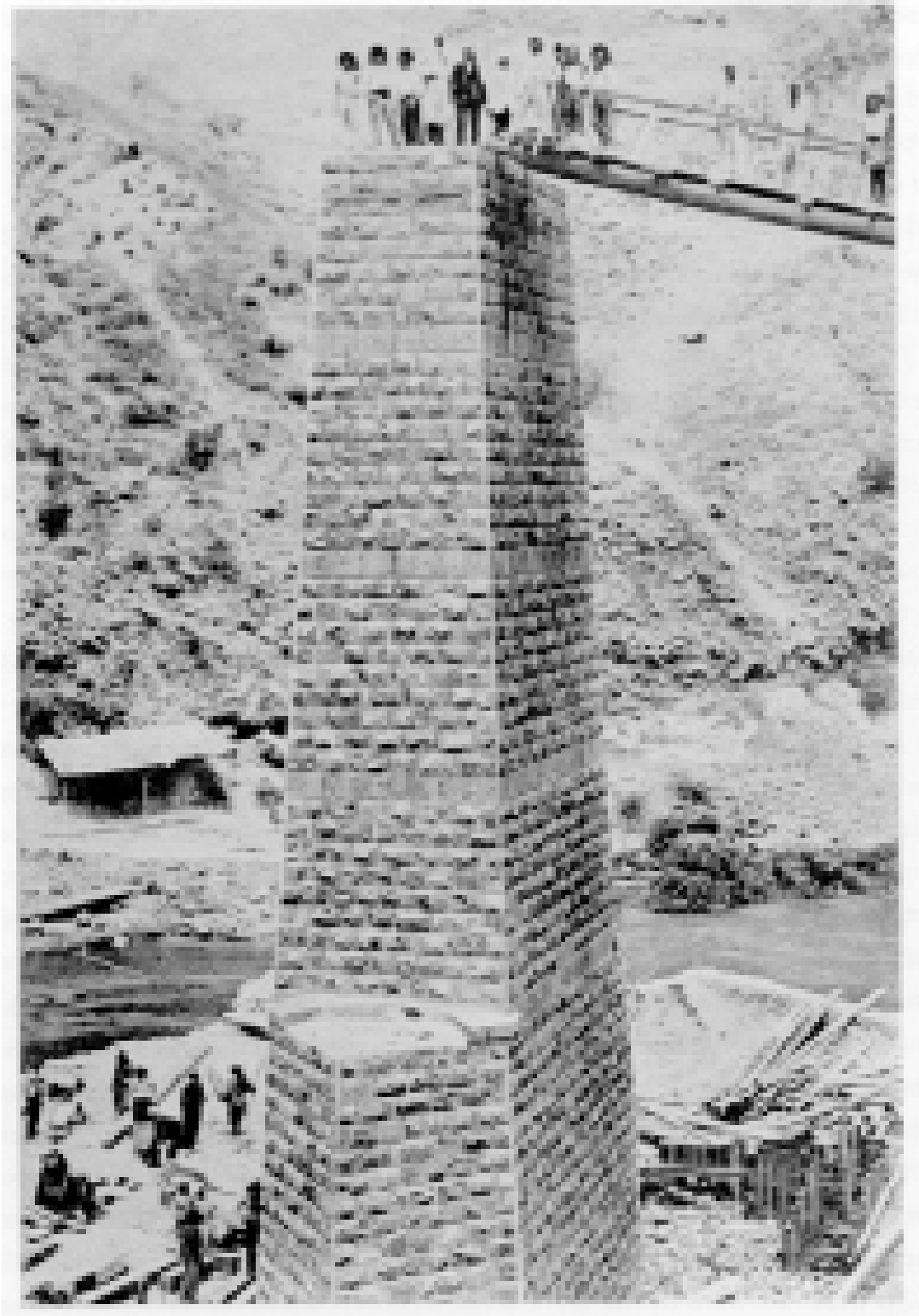


Fig. 5.13. Unknown, view of an ashlar pier for an iron railway bridge near completion in Palestine, 1910-11. *Salname-yi Beyrut* [as shown in Zeynep Çelik, *Empire, Architecture and the City* (Seattle: University of Washington Press, 2008), 32].



Fig. 5.14. American Colony (Jerusalem), view of the provisional wooden railway bridge over the Euphrates, c. 1910. LOC matpc 04668.

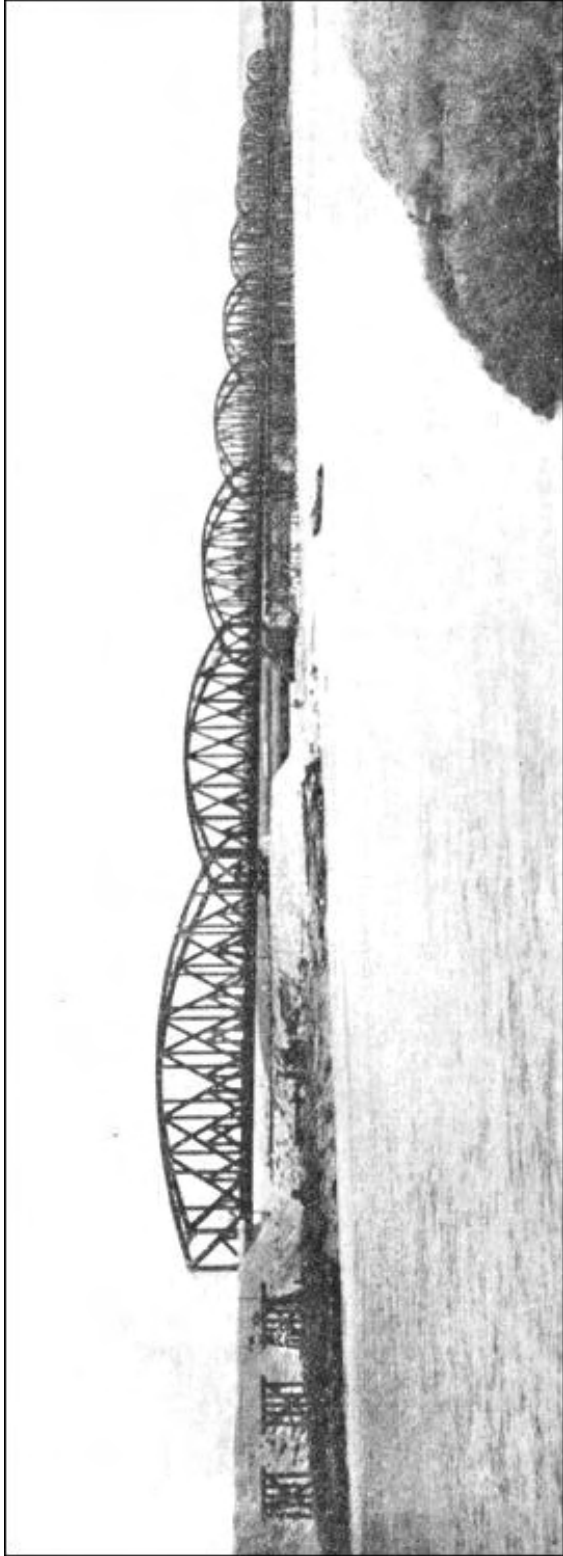


Fig. 5.15. Unknown, view of the Euphrates railway bridge, c. 1917. Courtesy Bill Milhomme.

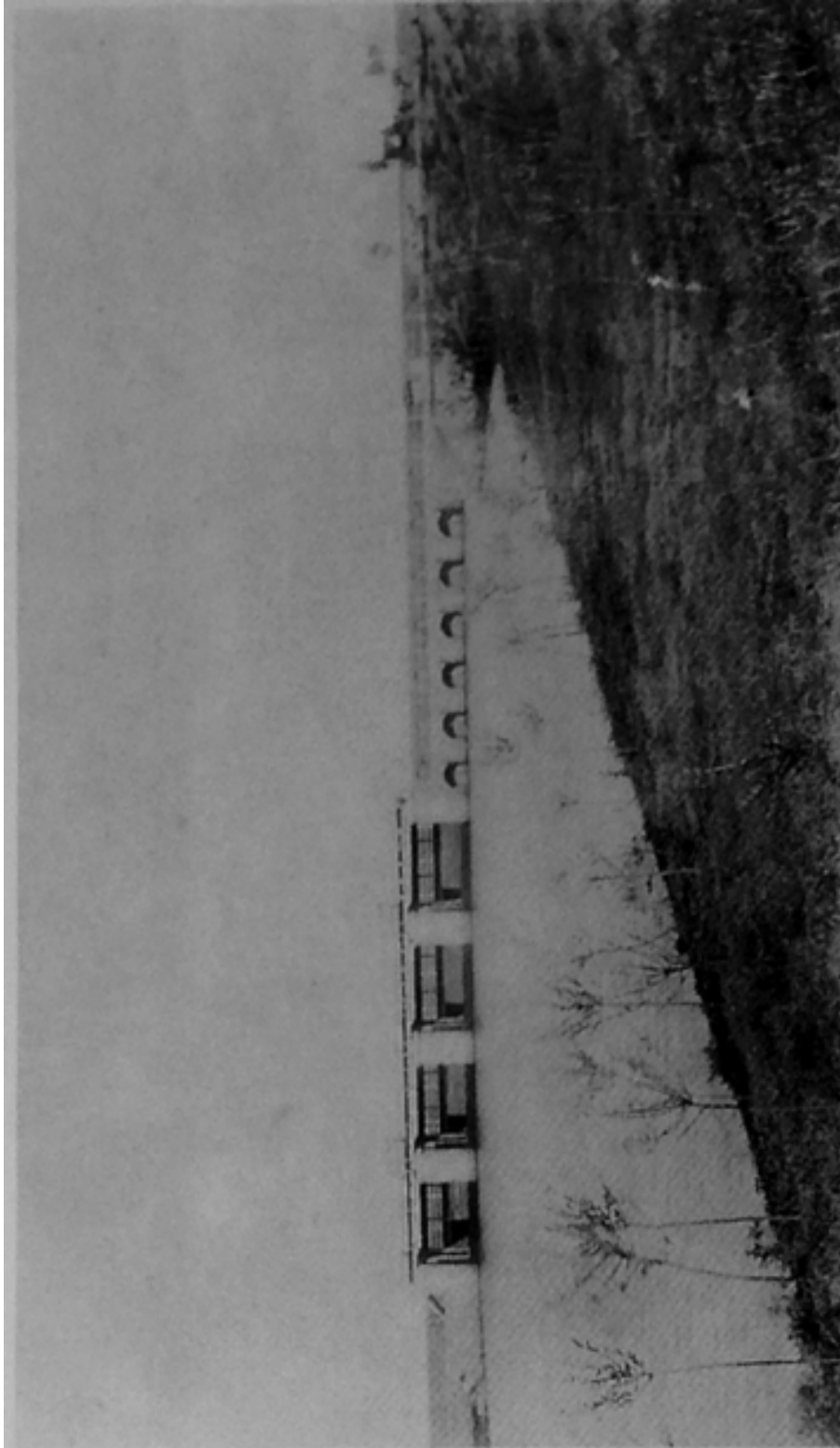


Fig. 5.16. Unknown, depiction of irrigation dam built in conjunction with the Baghdad railway in the Cilician Plain, near Konya, 1911 from *Reisebericht für die Anatolische Eisenbahn-Gesellschaft* (1912).



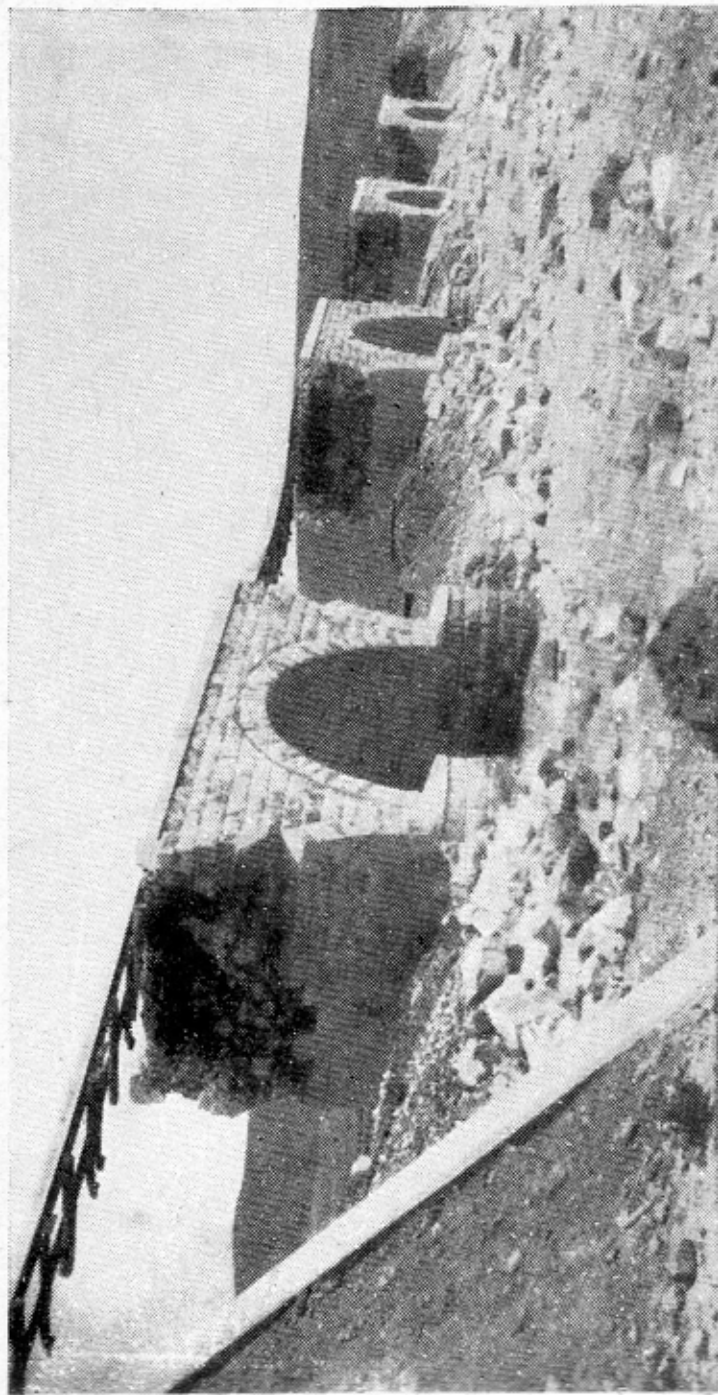
Fig. 5.17. Unknown, depiction of grains studied for the irrigation projects built in conjunction with the Baghdad railway in the Cilician Plain, near Konya, 1911, from the *Reisebericht für die Anatolische Eisenbahn-Gesellschaft* (1912).



Fig. 5.18. Haithem Hammad, Ten Arches Railway Bridge, Amman, 1902.



Fig. 5.19. Unknown, view of the bridge at Wadi Ithil, c. 1908. © Christies.



THE ASLUJ BRIDGE AFTER THE EXPLOSIONS.

Fig. 5.20. Unknown, possibly Lieutenant Colonel C. Guy Powles, photograph of the Asluj railway bridge after its destruction by the Allied Forces in World War I. From Lieutenant Colonel C. Guy Powles, *The New Zealanders in Sinai and Palestine* (Auckland, Whitcombe and Tombs Limited, 1922), 113.

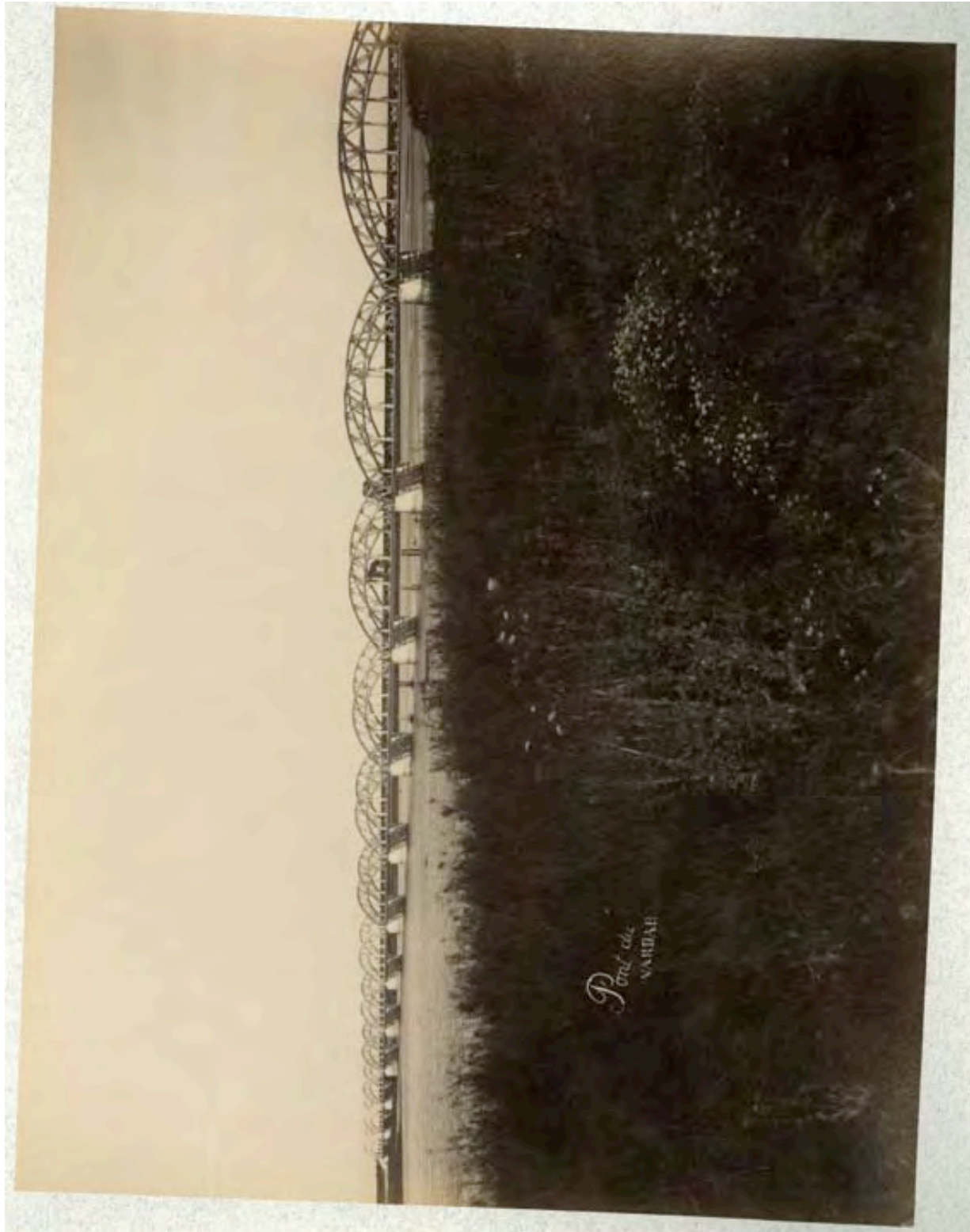


Fig. 5.21. Paul Zepdji, rail ridge at Vardar, c. 1894. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.



Fig. 5.22. Guillaume Gustave Berggren, view of the Anatolian Railway, Bridge between Mekece and Osmaneli stations over the Sakarya River, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.



Fig. 5.23. Rail tunnel north of Belemelik. Photograph of the author.

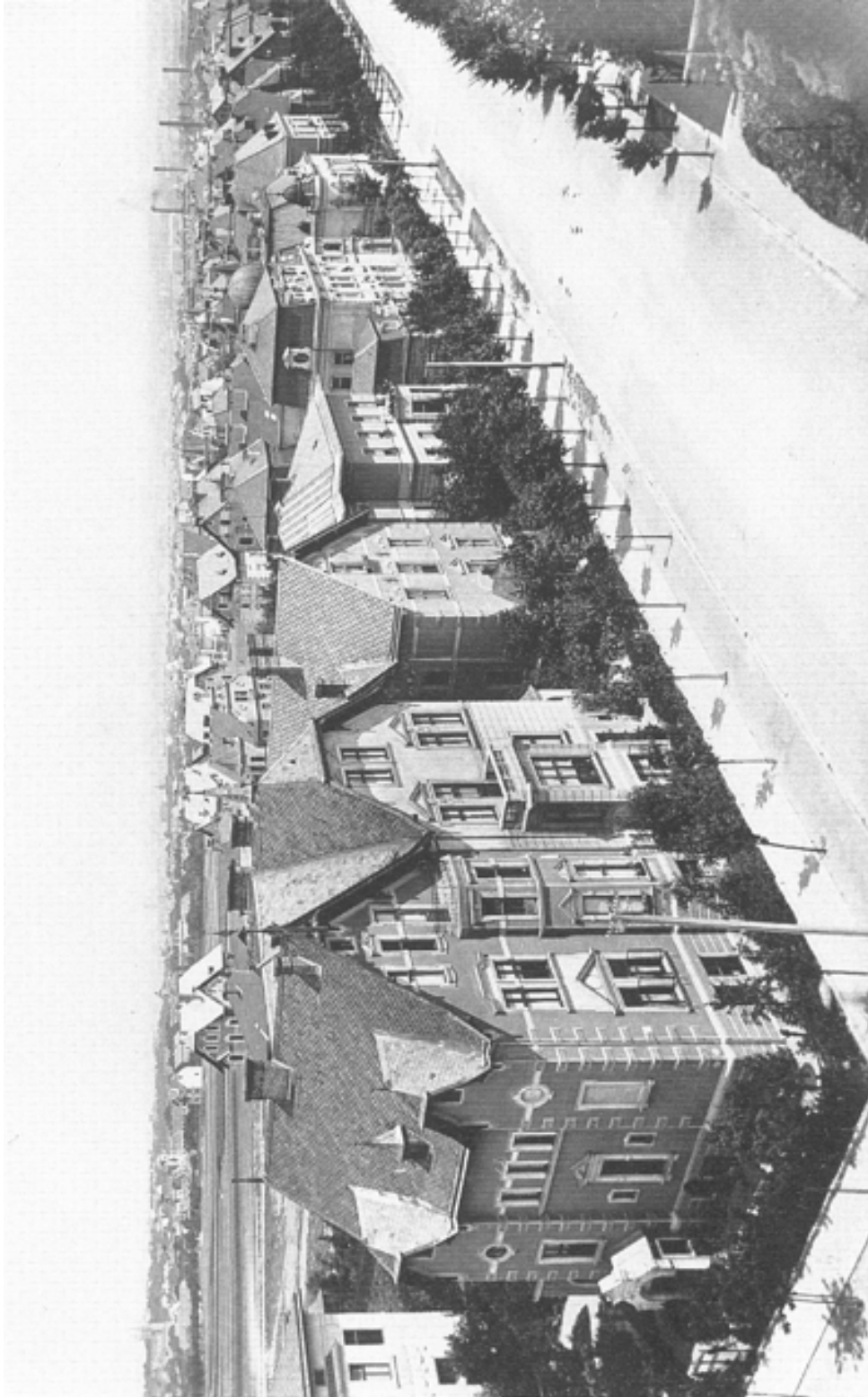


Fig. 5.24. Max Meyer Sperling, Heimatstil residential development on Vienna's Hasenauerstraße, seen from Gregor-Mendel-Straße, 1900. From Helfried Seemann, Christian Lunzer, eds., *Döbling Album 1860-1930* (Vienna: Verlag für Photographie, 1991).



Fig. 5.25. Dobrljin station, track side, 2011. Photograph: Jan Přikryl.



Fig. 5.26. Postcard depicting the Banja Luka train station, city side, date unknown. Wikimedia Commons.



Fig. 5.27. Postcard depicting the Edirne train station, track side, date unknown. Wikimedia Commons.



Fig. 5.28. Postcard depicting the Filibe train station, track side, date unknown. Wikimedia Commons.



Fig. 5.29. Railway building at Belovo. Wikimedia Commons.



Fig. 5.30. Skobelovo station. Wikimedia Commons.



Fig. 5.31. Unknown, Üsküb station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.



Fig. 5.32. Unknown, Agoustos station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.



Fig. 5.33. Unknown, Guida-Kapsohora station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.



Fig. 5.34. Unknown, Karaferia station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.



Fig. 5.35. Unknown, Ekchisou station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.



Fig. 5.36. Unknown, Vertekop station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.



Fig. 5.37. Unknown, Ostrovo station, track side. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 10 Kasten 3.

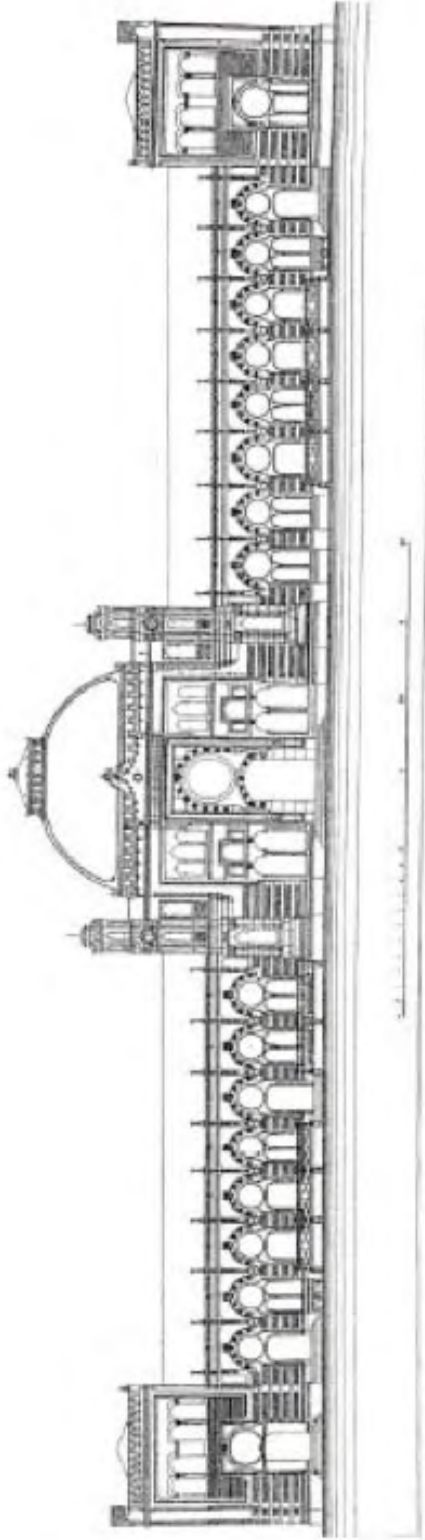


Fig. 5.38. Sirkeci station, longitudinal elevation, north street side. TCDD, Sirkeci.



Fig. 5.39. Sirkeci station, exterior view, north entry. Photograph of the author.



Fig. 5.40. Sirkeci station, detail of clock and tower on north entry. Photograph of the author.



Fig. 5.41. Sirkeci station, north entry. Photograph of the author.



Fig. 5.42. Sirkeci station, window detail. Photograph of the author.



Fig. 5.43. Sirkeci station, north entry, fenestration and cladding detail. Photograph of the author.



Fig. 5.44. Sirkeci station, window grill detail. Photograph of the author.



Fig. 5.45. Sirkeci station, interior view, main waiting hall. Photograph of the author.



Fig. 5.46. Sirkeci station, interior view, restaurant. Photograph of the author.



Fig. 5.47. Sirkeci station, interior view, main waiting hall, wall detail. Photograph of the author.

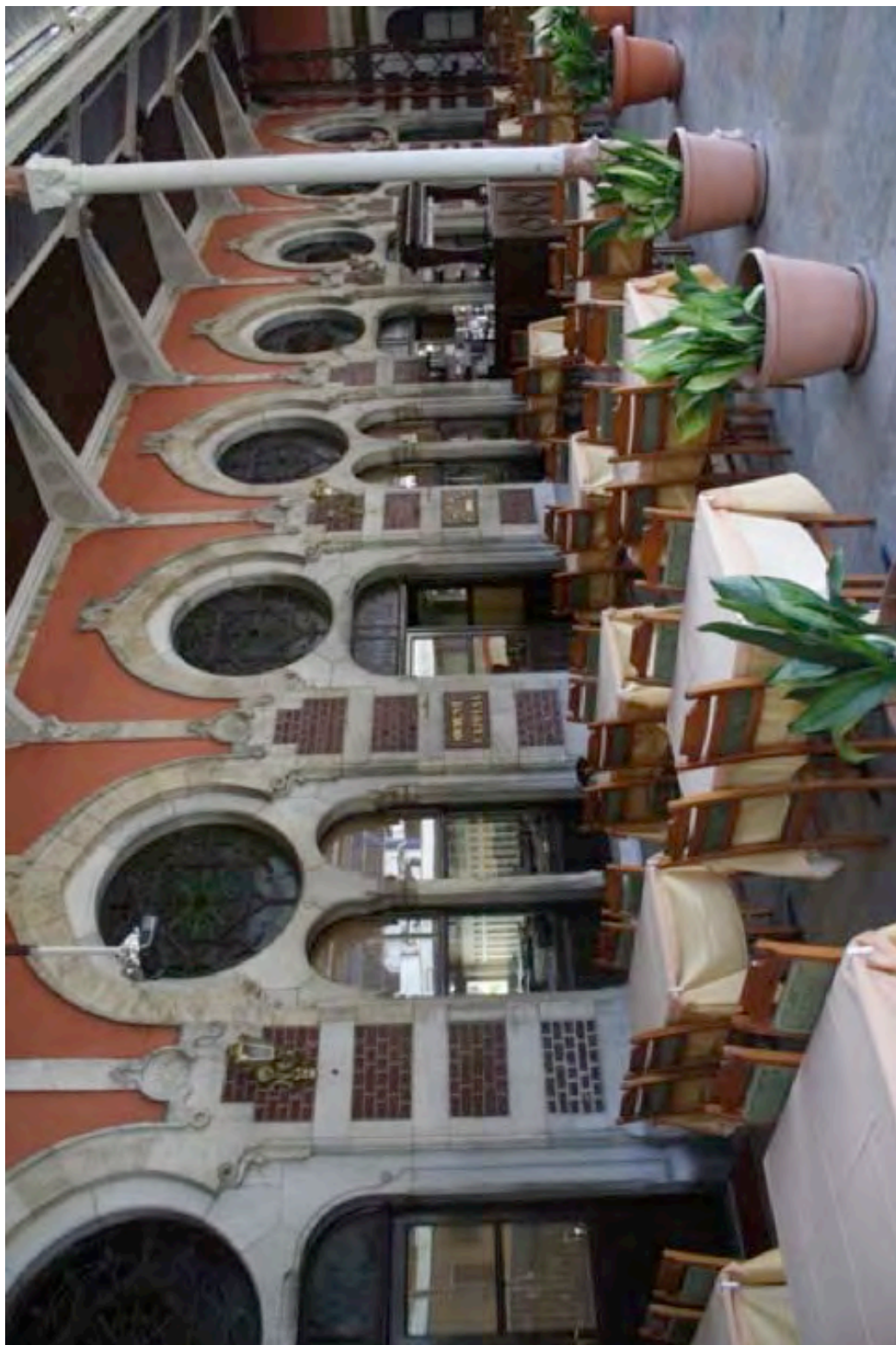


Fig. 5.48. Sirkeci station, exterior view, track side. Photograph of the author.

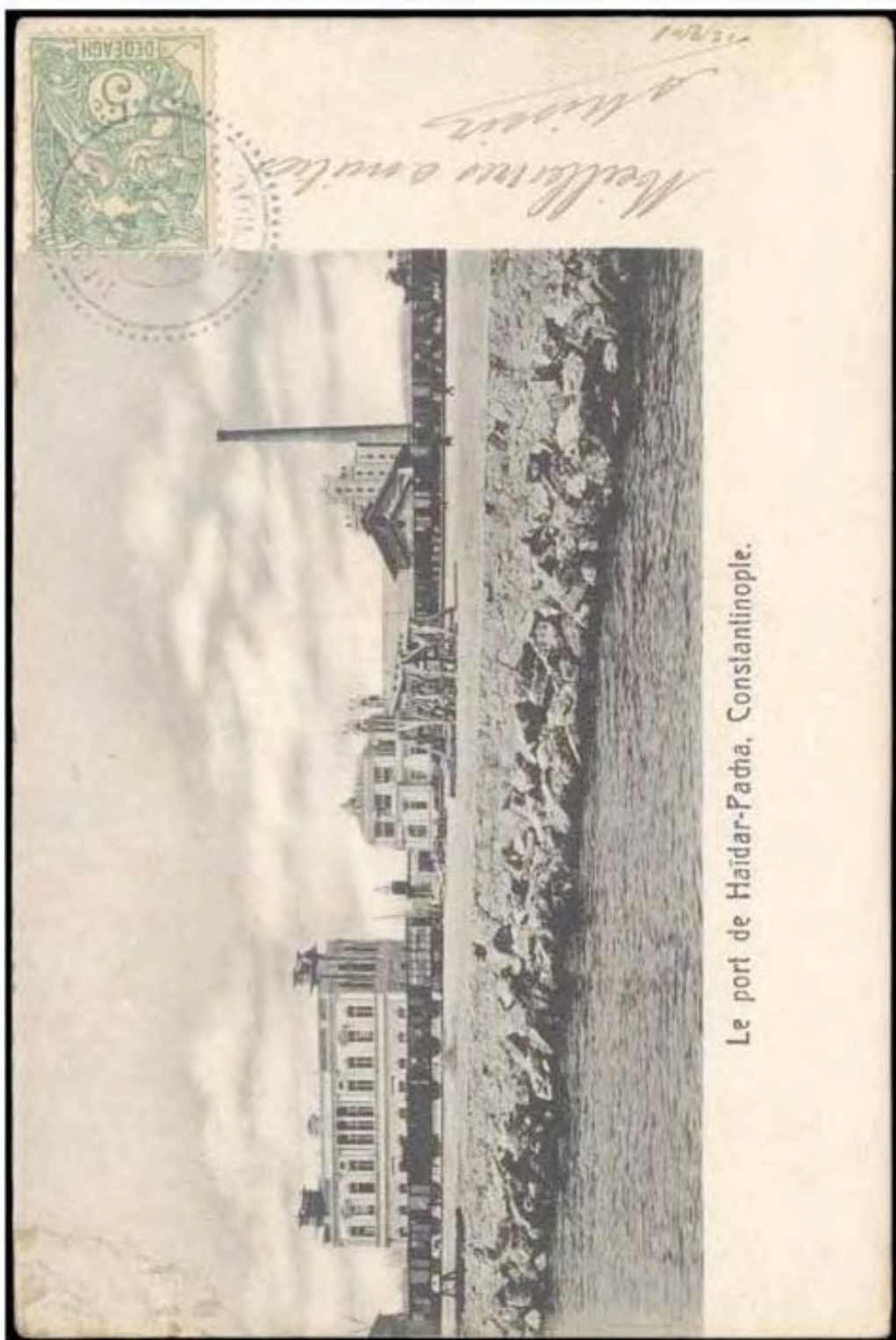


Fig. 5.49. Postcard depicting the port of Haydarpaşa, c. 1878. Wikimedia Commons.

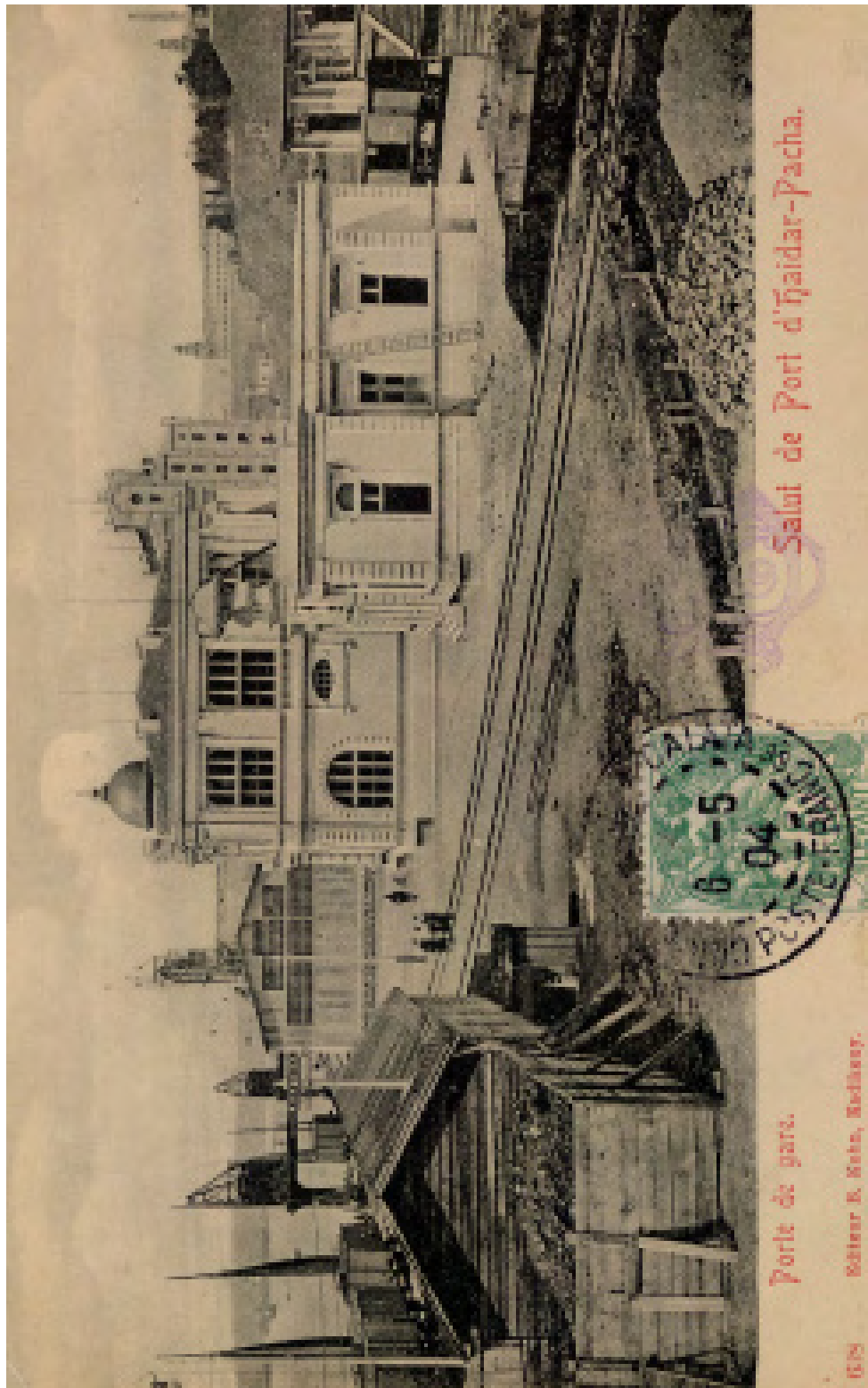


Fig. 5.50. Postcard depicting the port of Haydarpaşa, c. 1878. SALT Research, AHAYD008.



Fig. 5.51. Postcard depicting the passport bureau at the port of Haydarpaşa, c. 1878. SALT Research, AHAYD001.

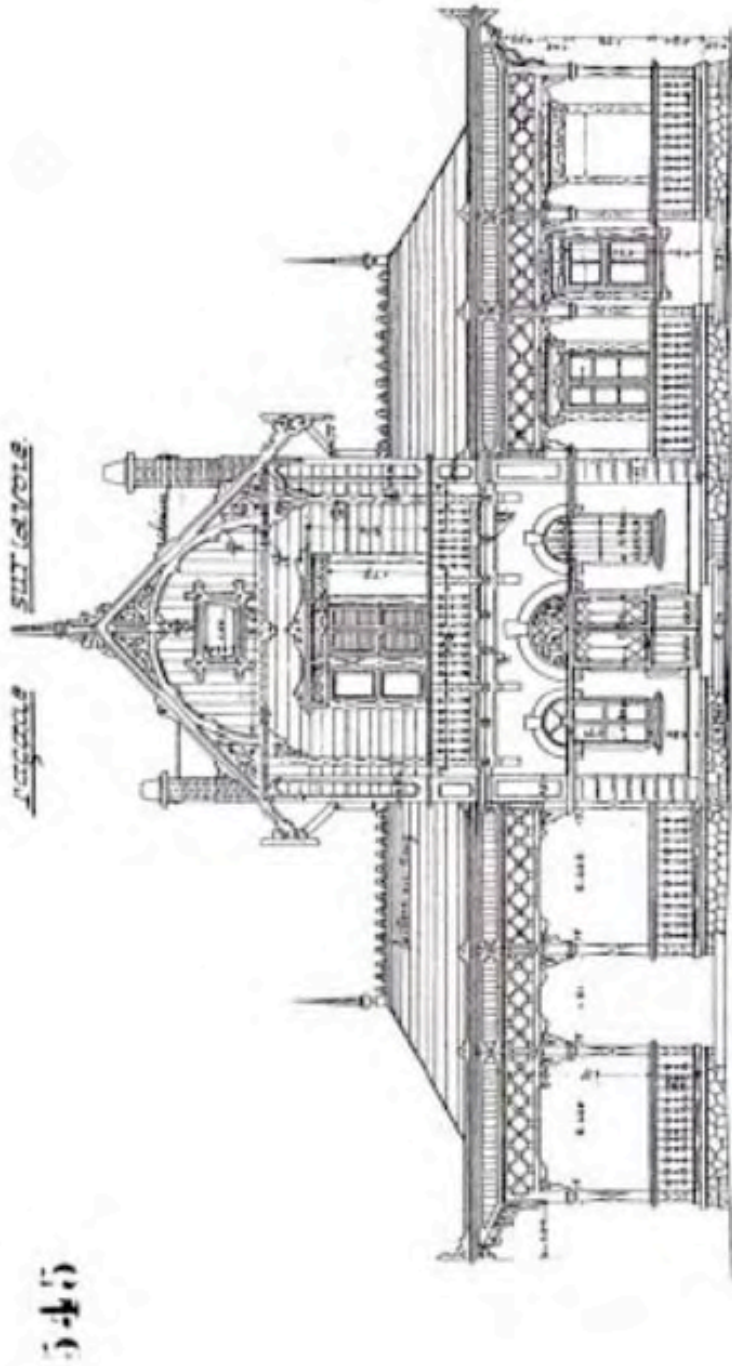


Fig. 5.52. Göztepe station, frontal elevation. TCDD 10A-3336/1.

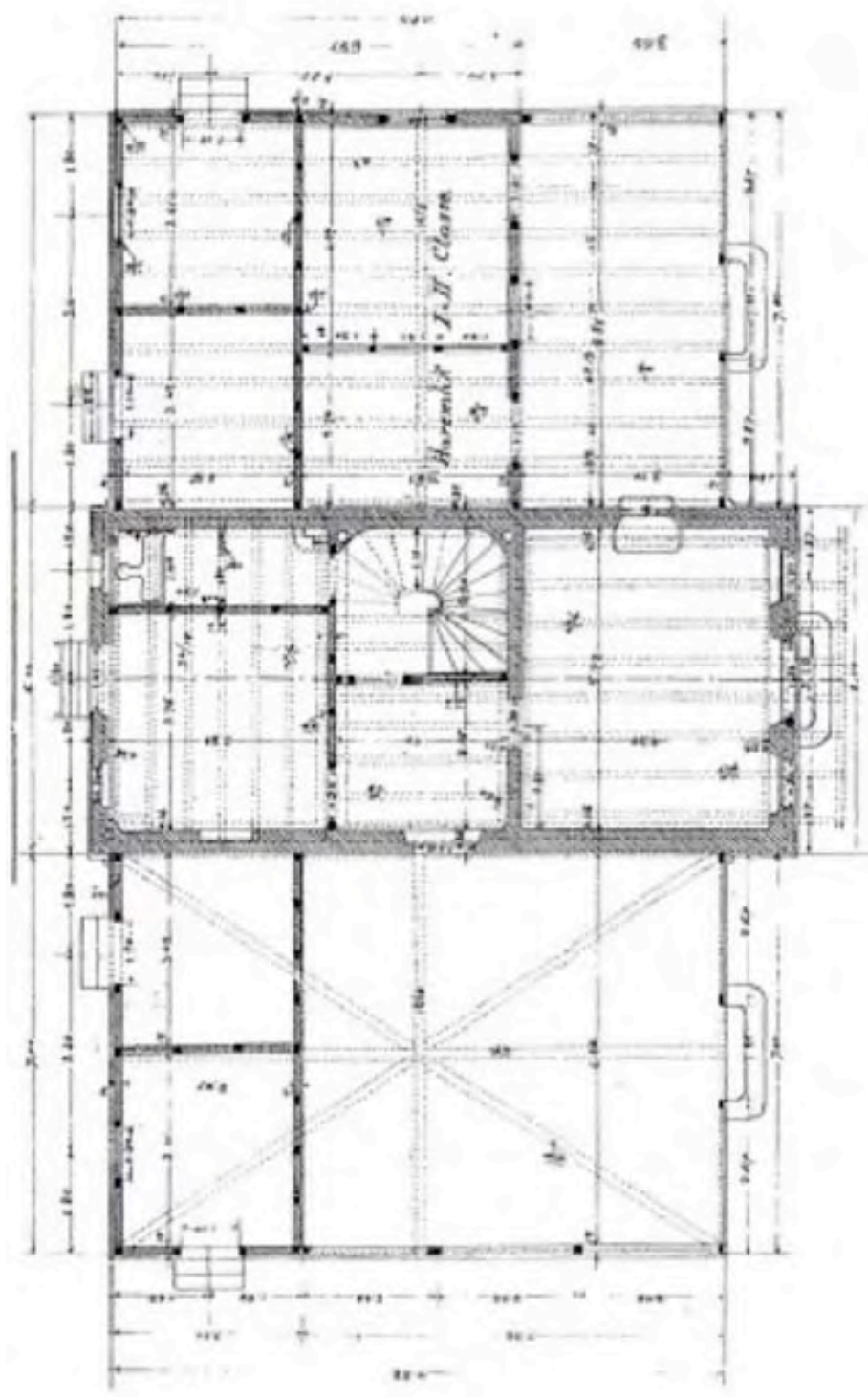


Fig. 5.53. Göztepe station, plan. TCDD 10A-3336/2.

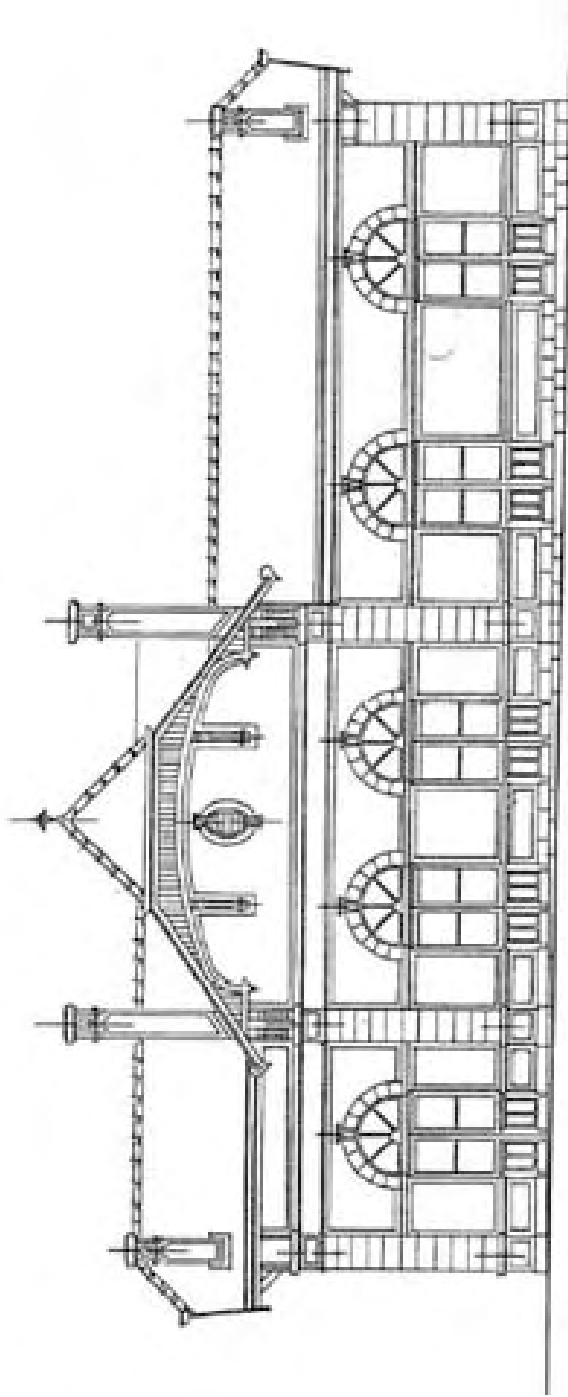


Fig. 5.55. Kızıltoprak station, track side elevation. TCDD 2G-487/1.

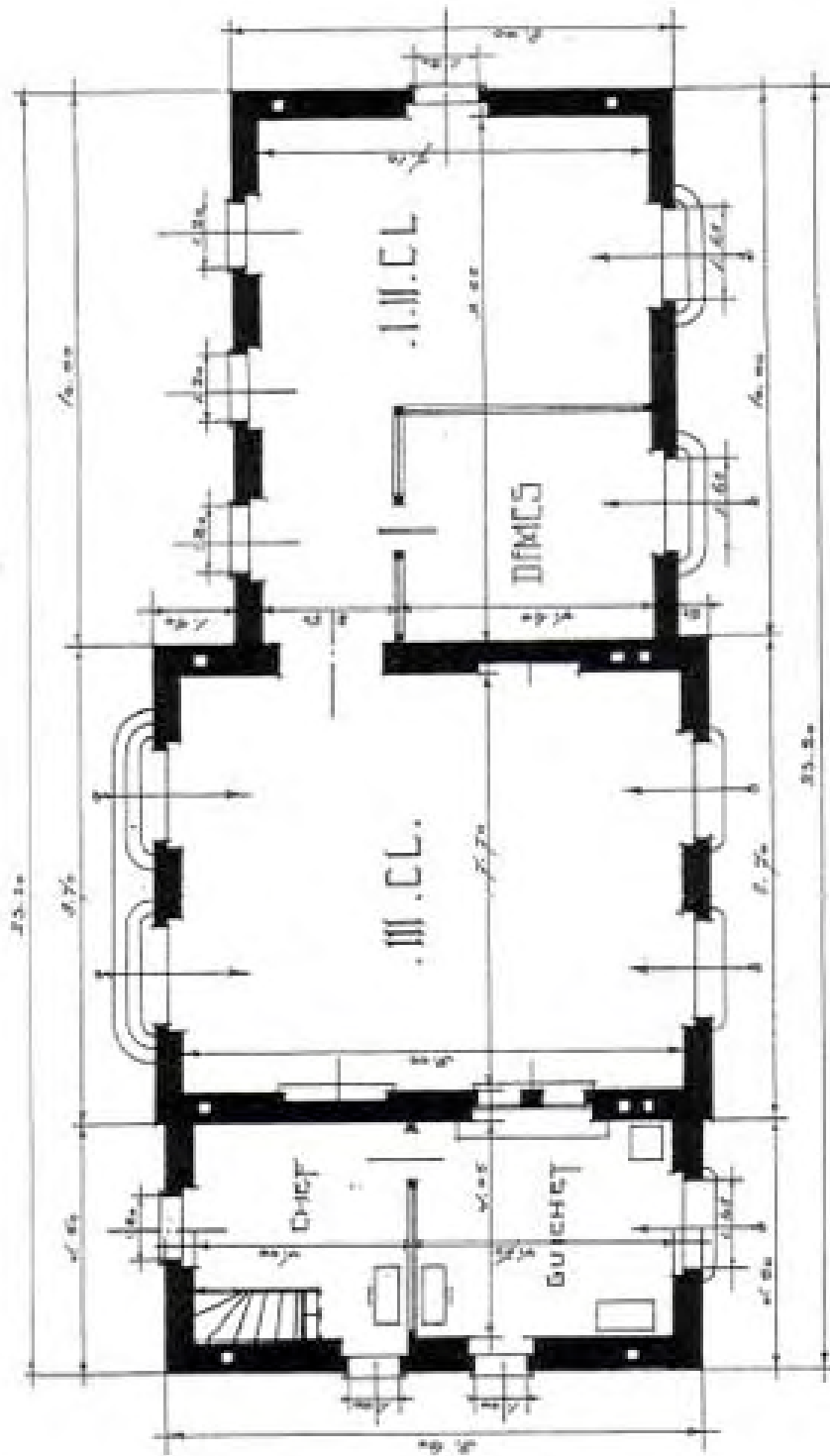


Fig. 5.56. Kızıltoprak station, plan. TCDD 2G-487/4.



Fig. 5.57. Guillaume Gustave Berggren, view of the depots at the port of İzmit, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.



Fig. 5.58. View of the Fenerbahçe train station, c. 1872. www.kentvedemiryolu.com.



Fig. 5.59. Guillaume Gustave Berggren, view of railway's traversal through İzmit, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.



Fig. 5.61. İzmit station, exterior view, main hall from southeast. Photograph of the author.



Fig. 5.62. Beylikköprü station, track side. Photograph of the author.

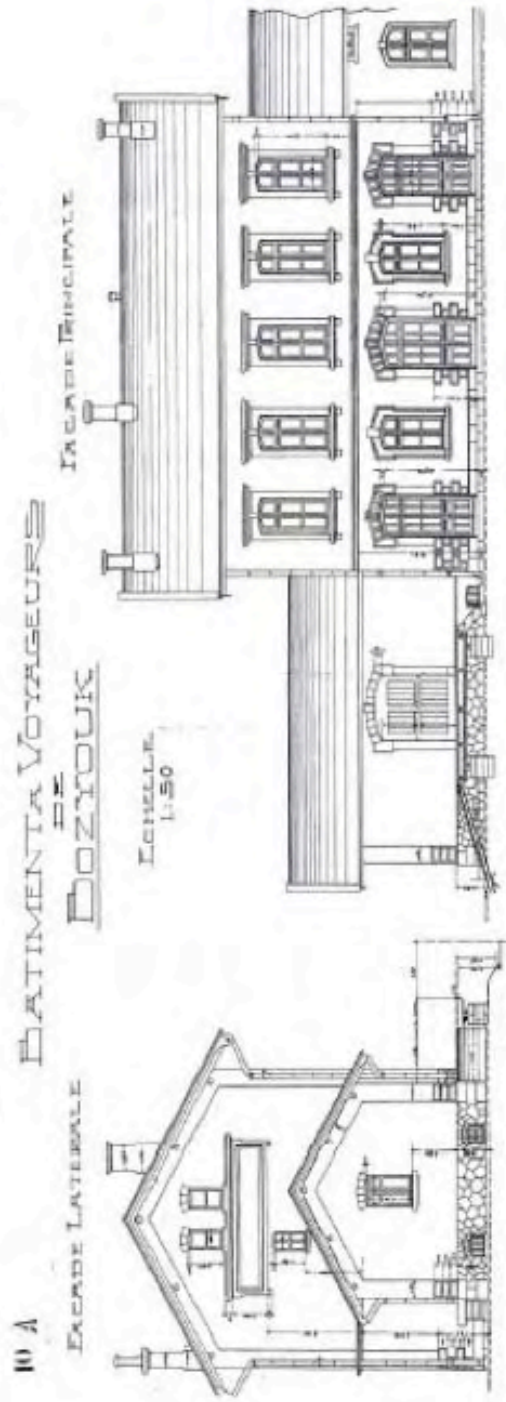


Fig. 5.63. Bozüyük station, elevations. TCDD 10 A-74/1.



Fig. 5.64. Sabuncupınar station, track side. Photograph: Mehmet Yavuz.



Fig. 5.65. Postcard depicting Afyonkarahisar station, city side. Wikimedia Commons.

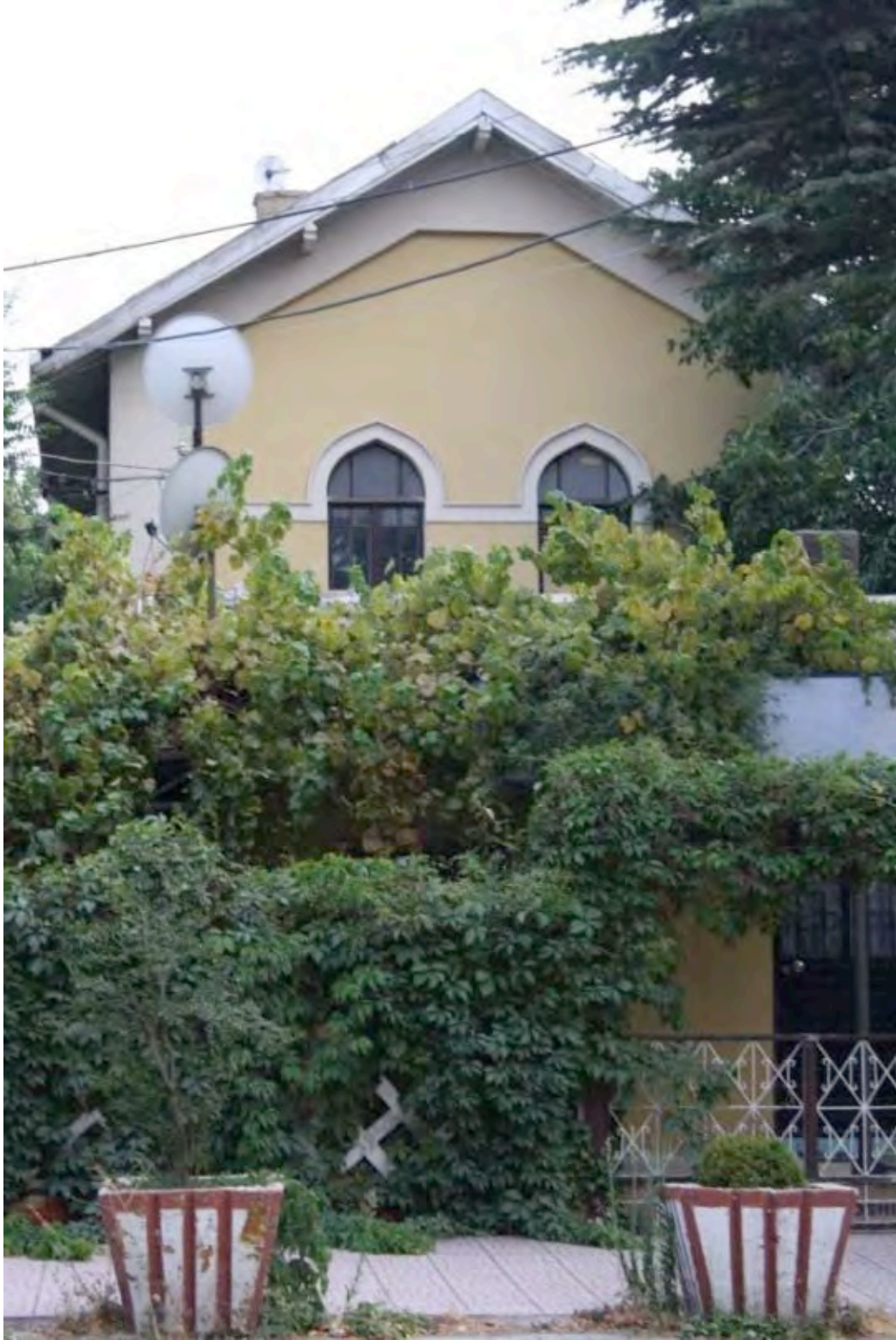


Fig. 5.67. Bilecik station building, exterior view. Photograph of the author.



Fig. 5.68. Guillaume Gustave Berggren, view of Eskişehir station, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 9.

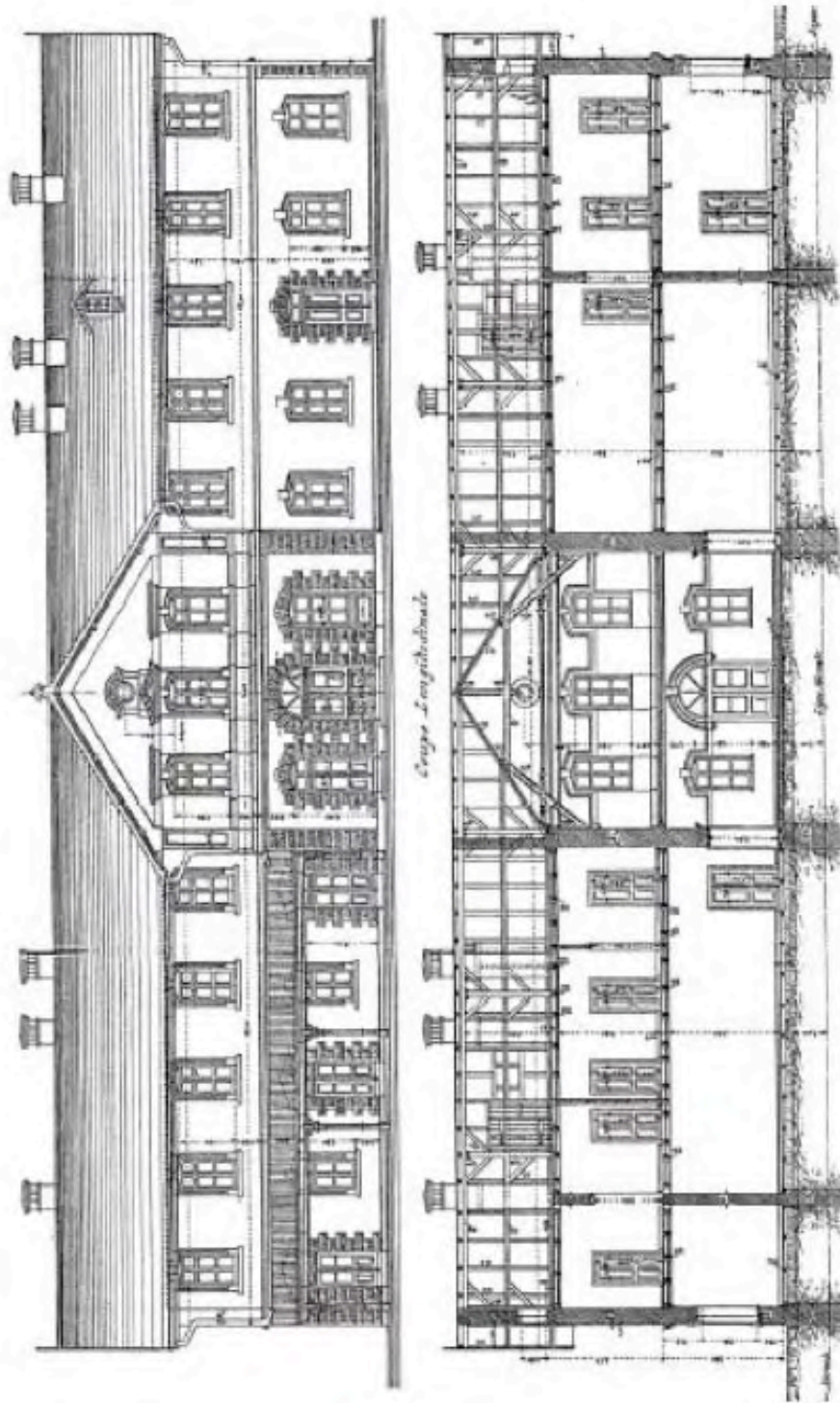


Fig. 5.69. Ankara and Eskişehir stations, longitudinal section and elevation. TCDD 10 A290/1.



Fig. 5.70. Guillaume Gustave Berggren, view of Eskişehir station (roof detail), c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 9.



Fig. 5.71. Guillaume Gustave Berggren, view of Eskişehir station (detail of ground level), c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 9.



Fig. 5.72. View of one of the few remaining signs noting the women's waiting room, railway station at Sabuncupınar, from c. 1892. Photo: Mehmet Yavuz.



Fig. 5.73. Exterior view, Ibis Hotel, formerly a grain silo adjacent to the Eskişehir railway station. Photograph of the author.



Fig. 5.74. Exterior view, grain silo adjacent to the Afyonkarahisar railway station. Photograph of the author.



Fig. 5.75. Çakmak station, water tower. Photograph of the author.



Fig. 5.76. Çiftehan station, water tower. Photograph of the author.



Fig. 5.77. Çakmak station, fencing detail. Photograph of the author.

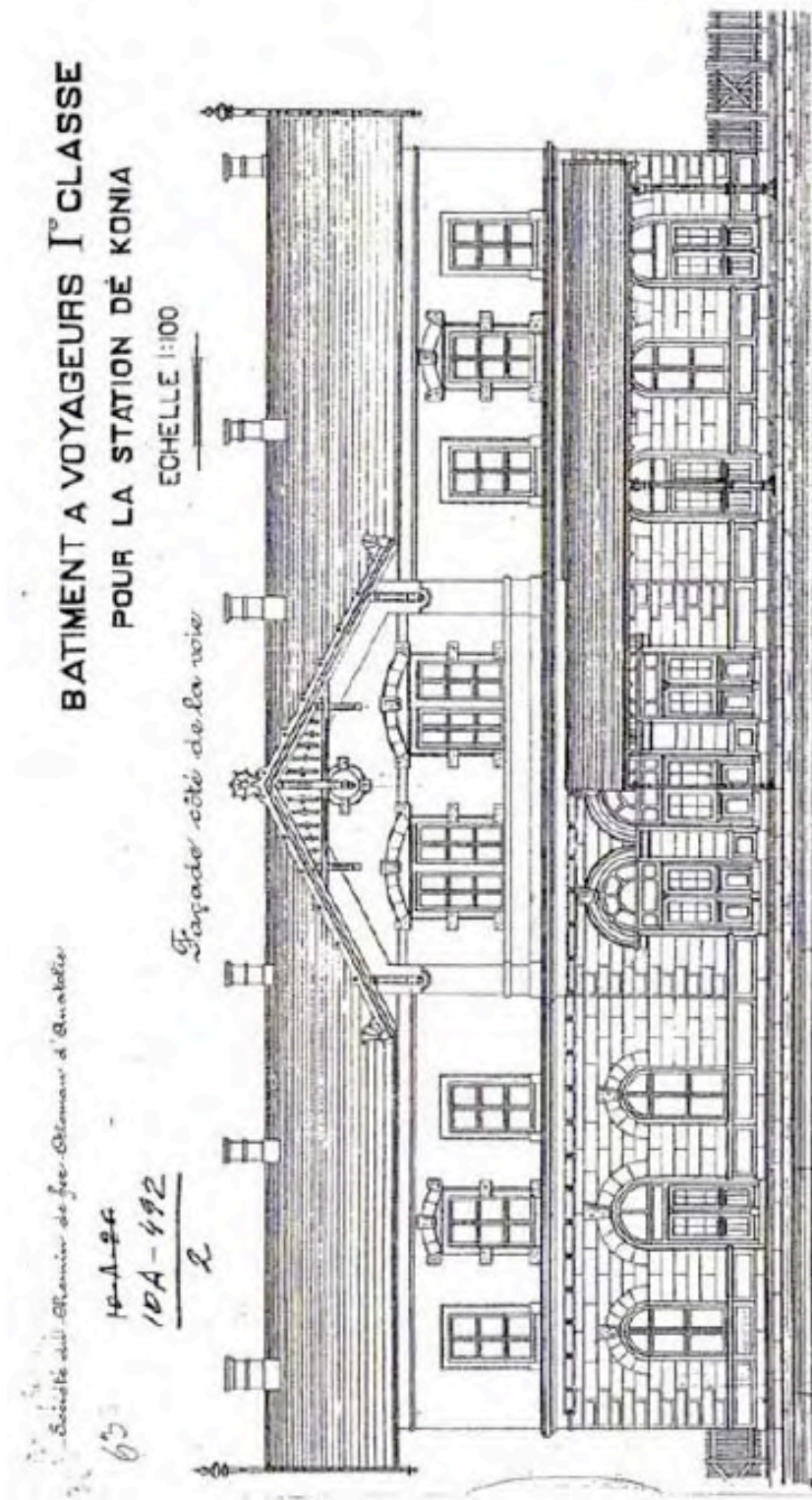


Fig. 5.78. Konya station, track side elevation. TCDD 10 A-492-2.



Fig. 5.79. Unknown, leaflet depicting the new station at Konya with the new regional court house, c. 1896. Wikimedia Commons.



Fig. 5.80. Konya station, main hall, ceiling and column detail. Photograph of the author.

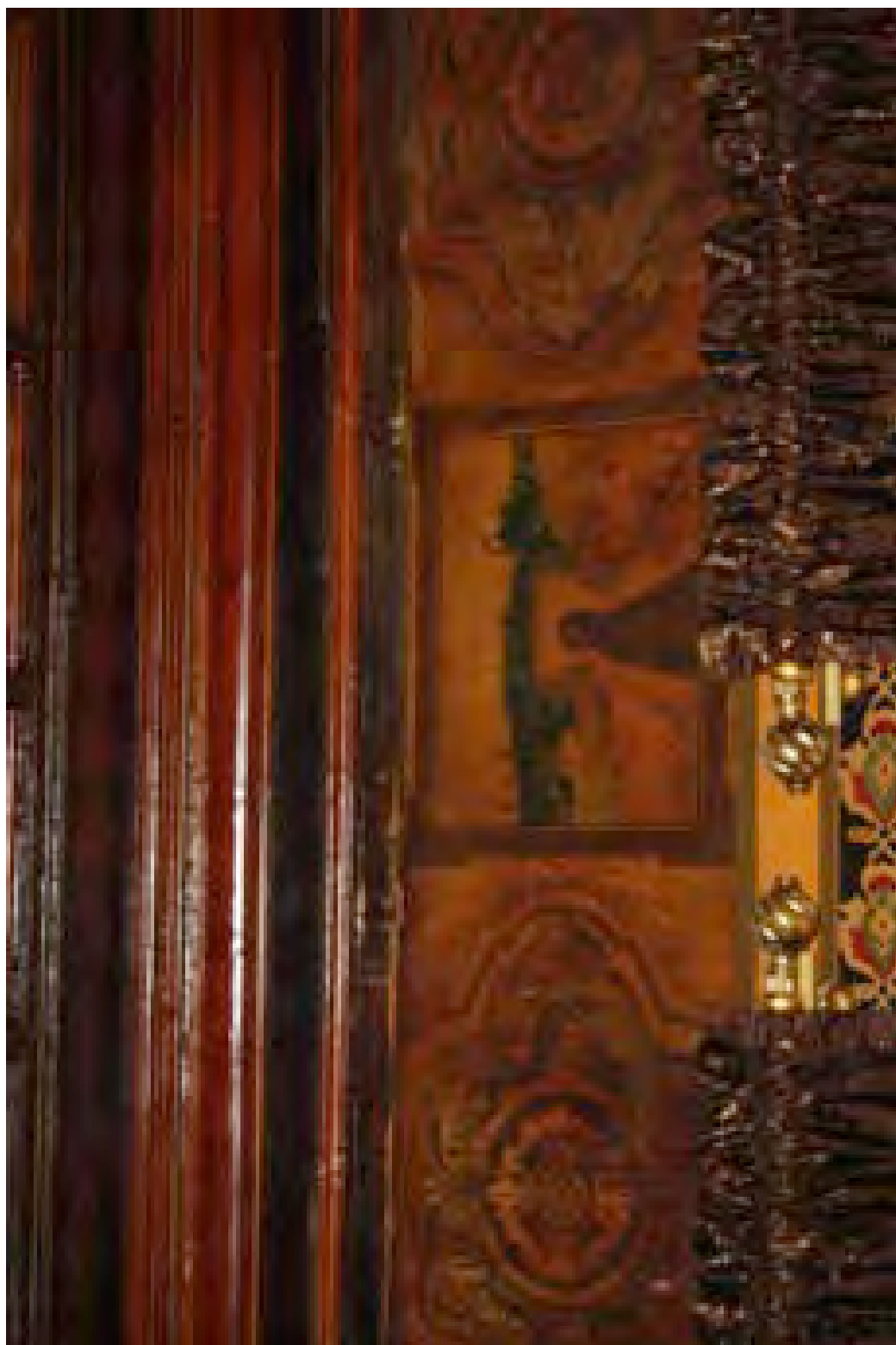


Fig. 5.81. Konya station, main hall, frieze painting (detail). Photograph of the author.



Fig. 5.82. Konya station, main hall, frieze painting (detail). Photograph of the author.



Fig. 5.83. Konya station, main hall, frieze painting (detail). Photograph of the author.

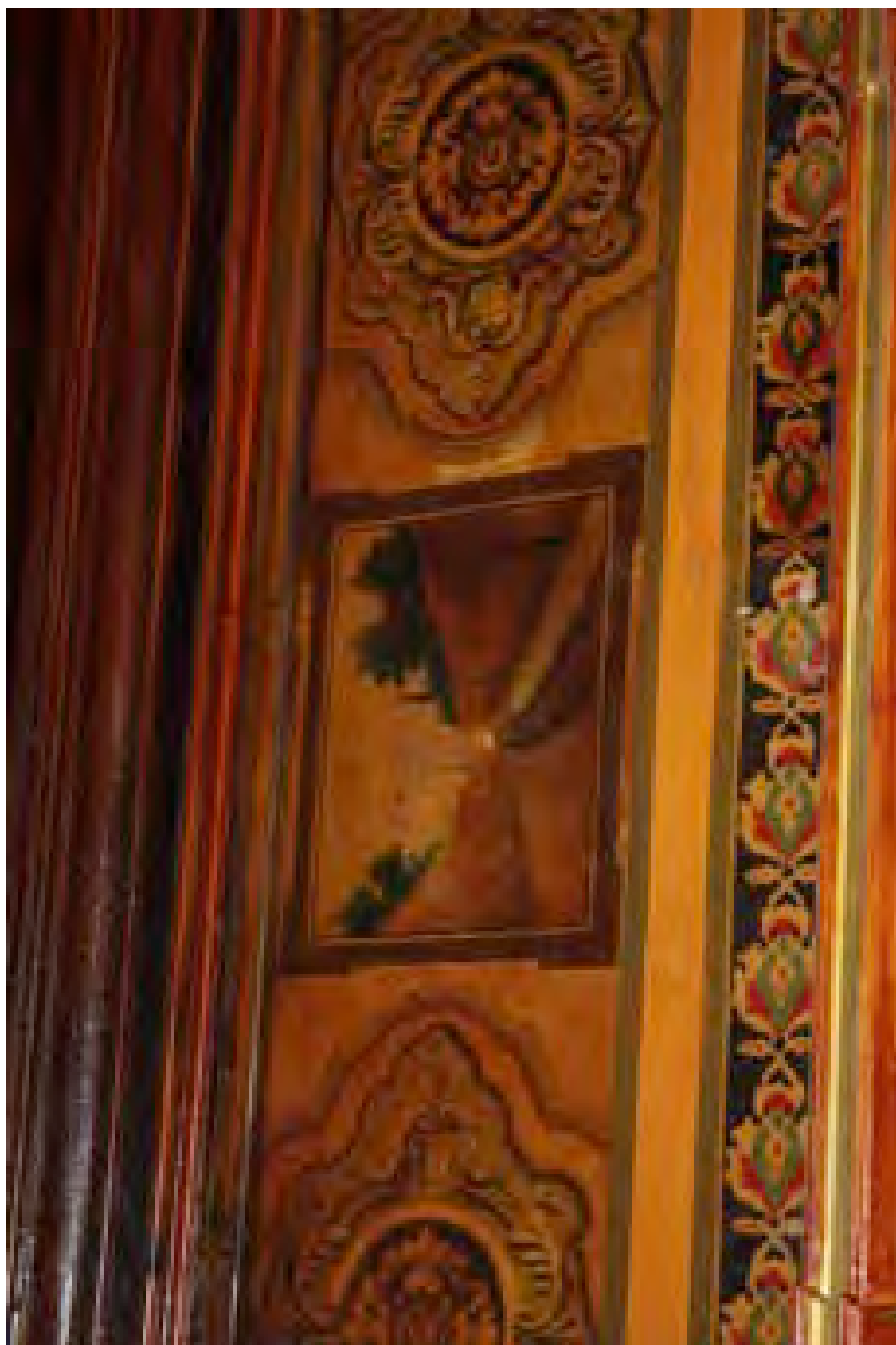


Fig. 5.84. Konya station, main hall, frieze painting (detail). Photograph of the author.



Fig. 5.85. Konya station, main hall, frieze painting (detail). Photograph of the author.



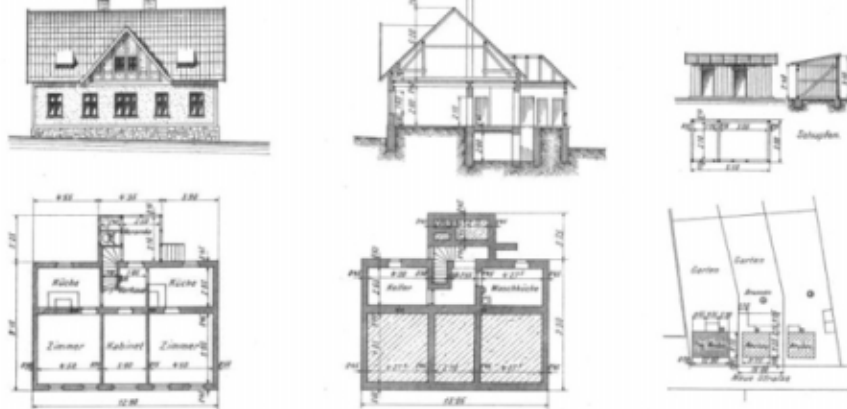
Fig. 5.86. Konya station, view of workers' colony. Photograph of the author.

Tafel 12.

DIE ARBEITERKOLONIE DER BERNDORFER METALLWARENFABRIK ARTHUR KRUPP IN BERNDORF.

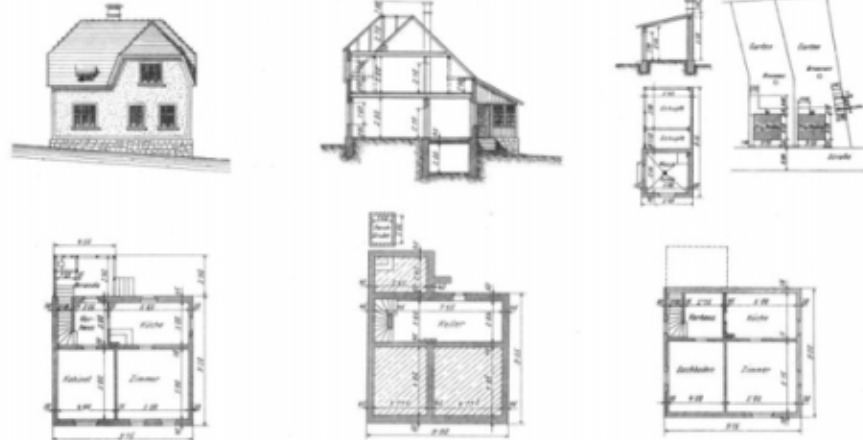
Arbeiter-Eigenhaus. (Baukosten $K' 12.400$, Grundkosten $K' 526$ für 947 m^2 .)

Schaubild auf Tafel 14.



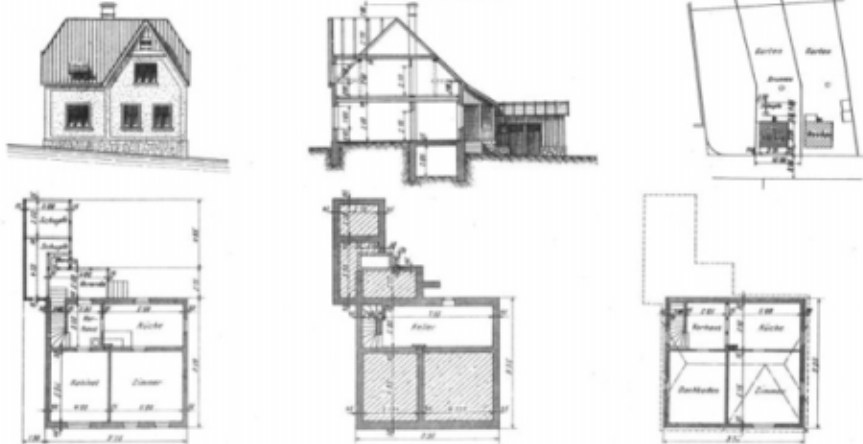
Arbeiter-Eigenhaus. (Baukosten $K' 11.300$, Grundkosten $K' 554$ für 998 m^2 .)

Schaubild auf Tafel 14.



Arbeiter-Eigenhaus. Type IIIa. (Baukosten $K' 11.000$, Grundkosten $K' 480$ für 864 m^2 .)

Schaubild auf Tafel 14.



Spec. Bauzeitung 1912.

Architekt u. Baugesellschaft von R. v. WALTHER, Ing. BREUER & Co., Wism.

Fig. 5.87. Plans and elevations of the Krupp worker colony at Berndorf. *Allgemeine Bauzeitung* 77 (1912), Tafel 12.



Fig. 5.88. Konya station, fence detail. Photograph of the author.



Fig. 5.89. Konya station, workers' colony, kitchen detail. Photograph of the author.



Fig. 5.90. Konya station, workers' colony, wallpaper detail. Photograph of the author.



Fig. 5.91. Konya station, view of swing set on front lawn of workers' colony. Photograph of the author.



Fig. 5.92. Konya station, view of stationmaster's residence. Photograph of the author.

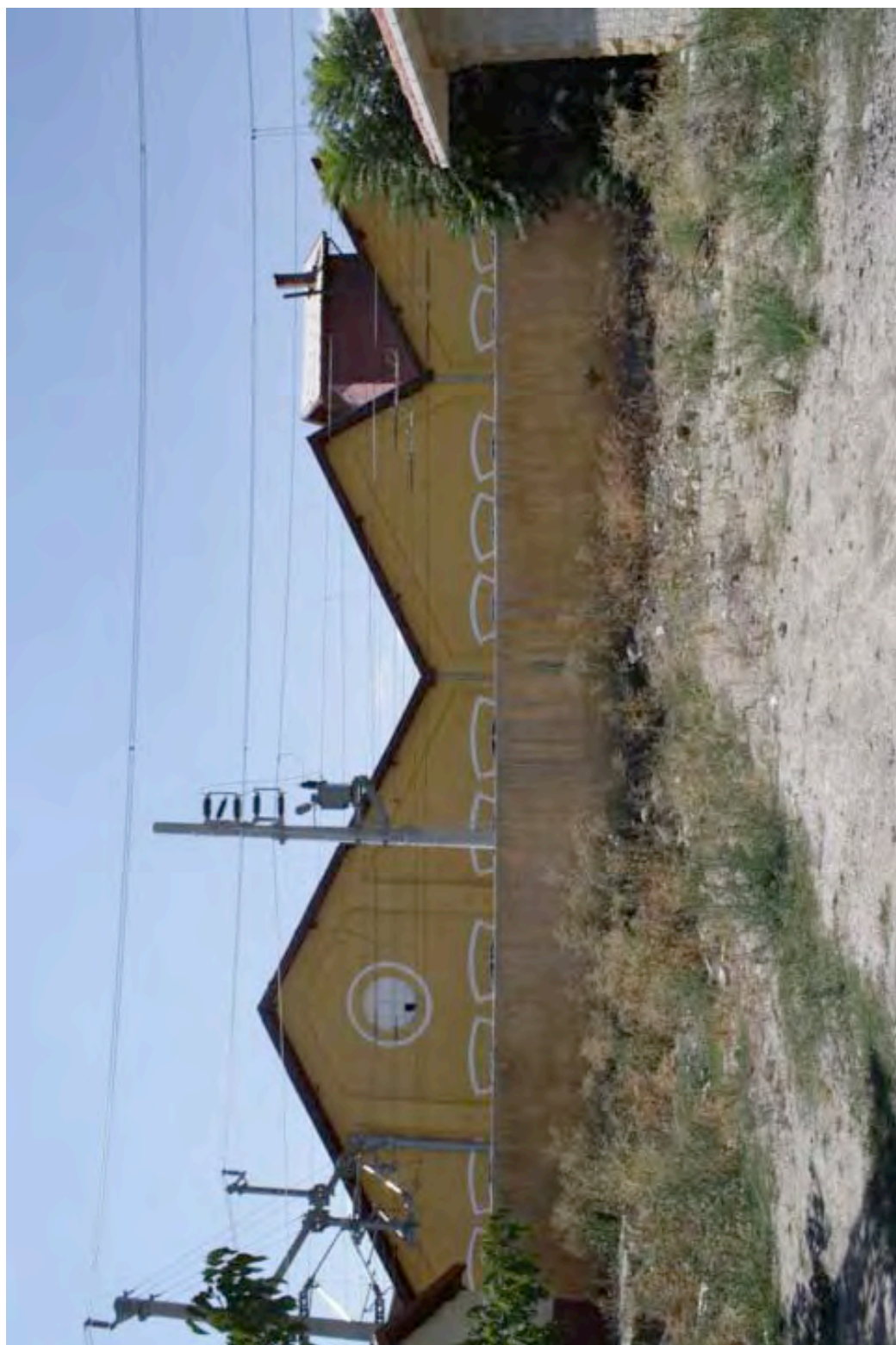


Fig. 5.93. Konya station, view of depot. Photograph of the author.



Fig. 5.94. Konya station, exposed rail gauge as part of the fencing for an outdoor patio of an engineer's house with the inscription "Krupp 1898" referring to the steel manufacturer – Krupp of Essen – and the year in which it was made. Photograph of the author.



Fig. 5.95. Exterior view, commercial building adjacent to station built in conjunction with the construction of Konya station. Photograph of the author.



Fig. 5.96. Guillaume Gustave Berggren, government konak, Konya, c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 5 I.

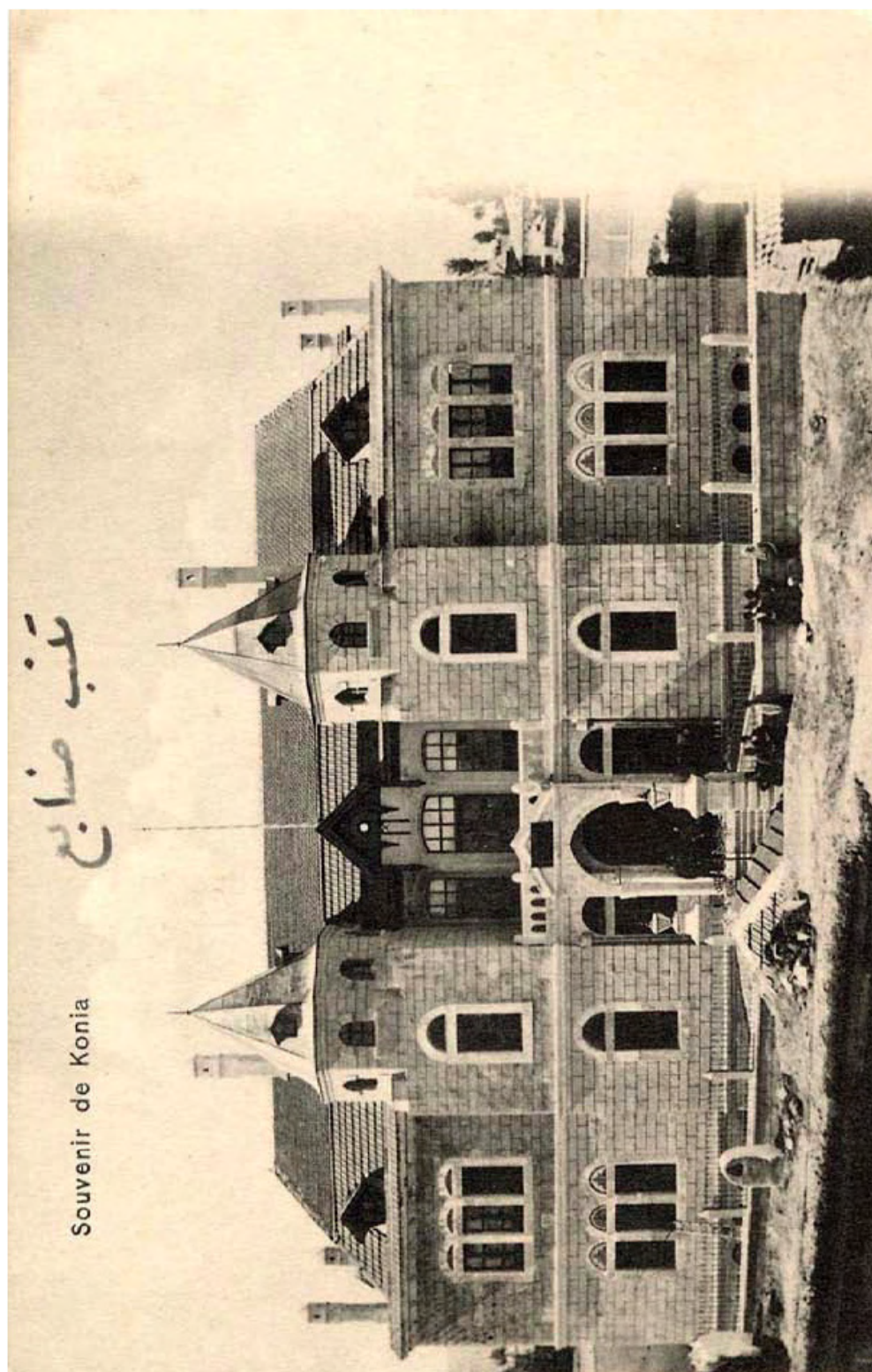


Fig. 5.97.Garaved K. Sokakian, postcard depicting the industrial school in Konya, c. 1901.
SALT Research, AHKON001.



Fig. 5.98. Unknown, Tabuk station, track side, c. 1909. Photograph: Durham University.



Fig. 5.99. al 'Ula station, auxiliary buildings. Photograph: Hamad Raza.



Fig. 5.100. Abu Na'am station and environs. Photograph: James Nicholson.



Fig. 5.101. Muazzam station, entry side. Photograph: Nabataea.net.



Fig. 5.102. Abu Na'am station, view of iron rungs set into the walls for defense purposes. Photograph: Matthew Sutherland.

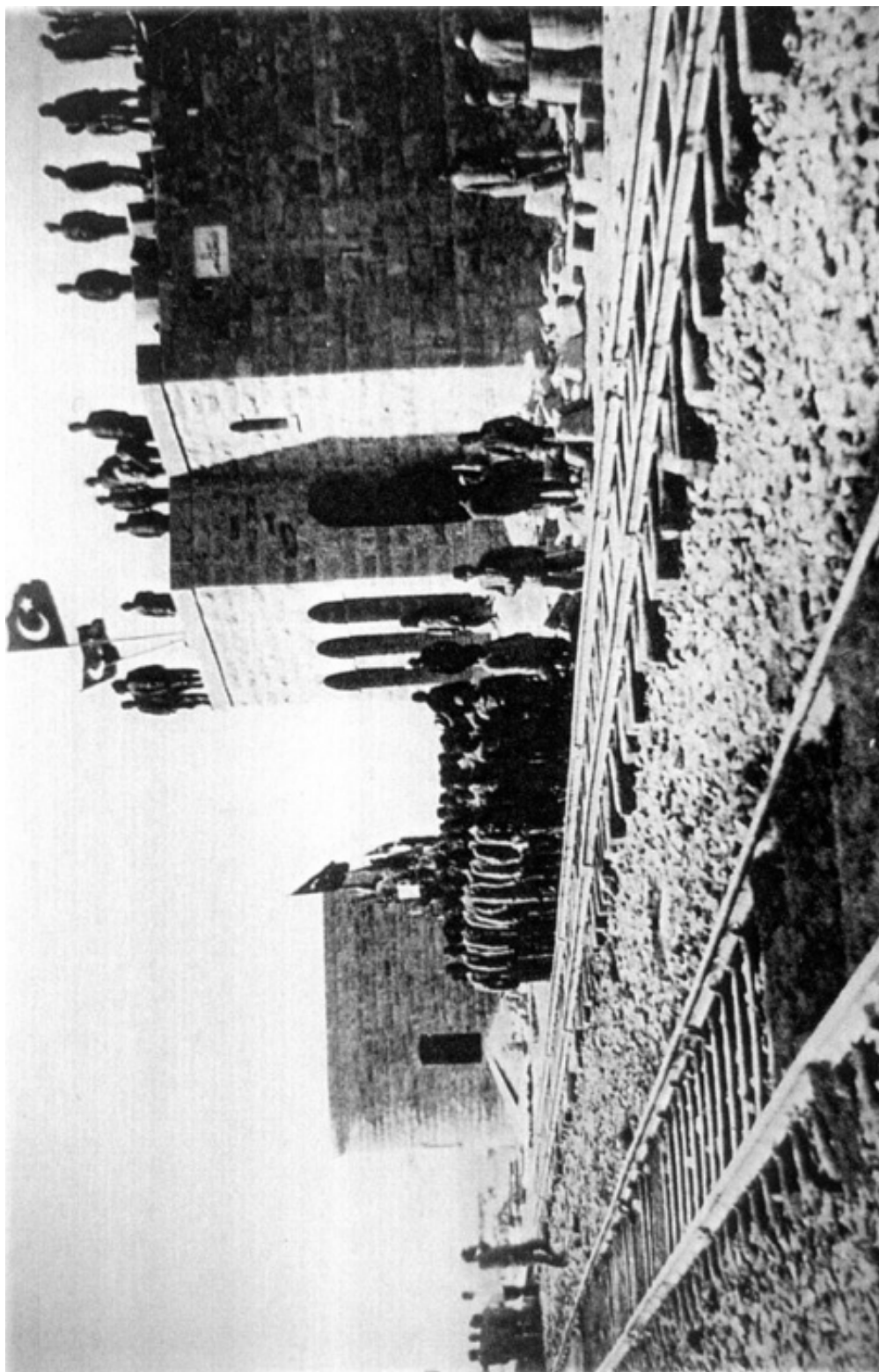


Fig. 5.103. Unknown, view of conscripts constructing Muazzam station. IWM.



Fig. 5.104. Muheit station, barracks and blockhouse. Photograph: Roger Bragger.

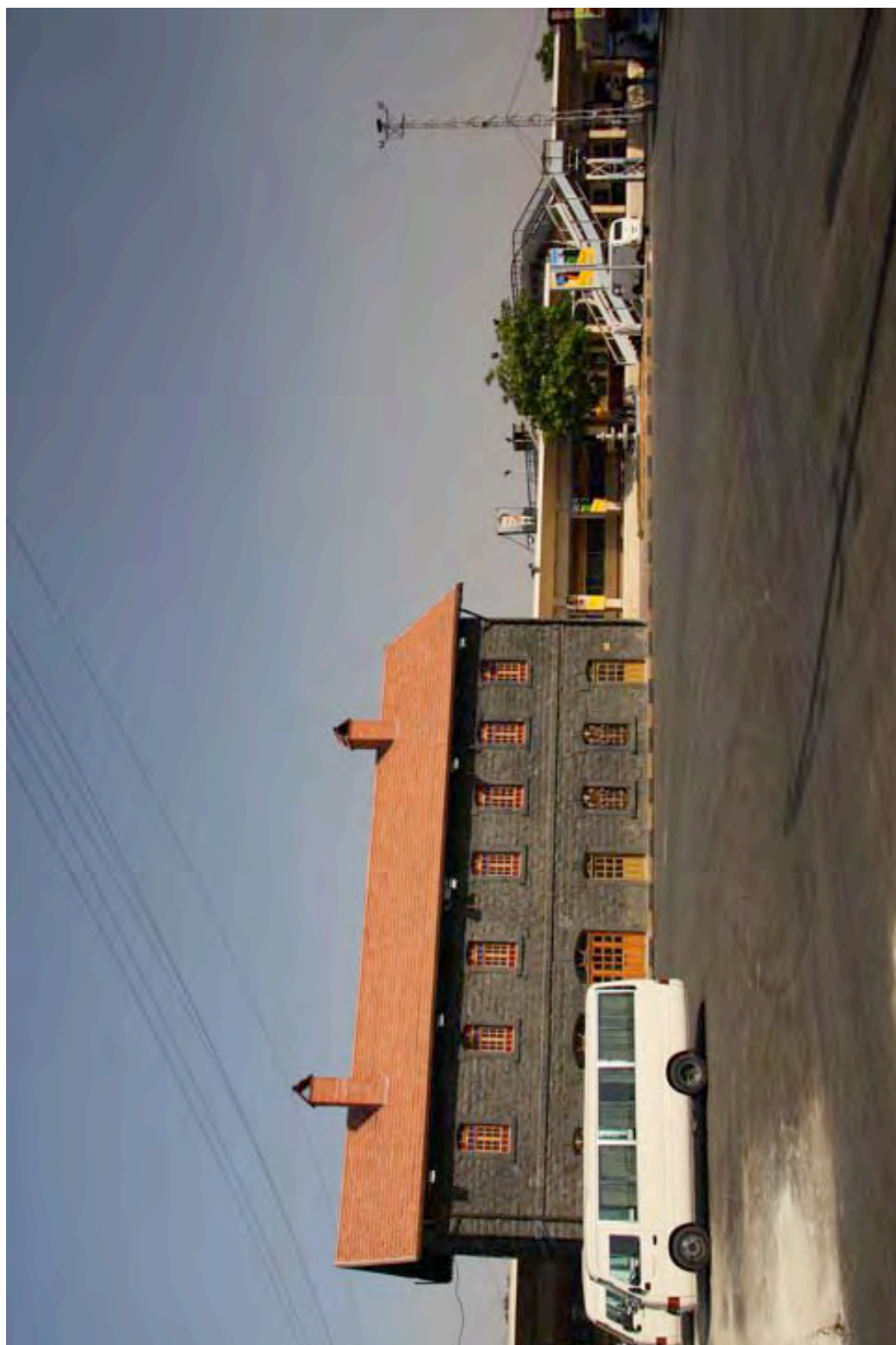


Fig. 5.105. Al Qadam station. Photograph: Gunter Hartnagel.



Fig. 5.106. Lieutenant Thomas Gerald George Fahey, view of Damascus main station, c. 1915.
Photograph: Newcastle University Cultural Collections, Robinson Family Collection.



Fig. 5.107. Aerial view of al 'Ula station and environs. APAAME 20020930 RHB-0049.

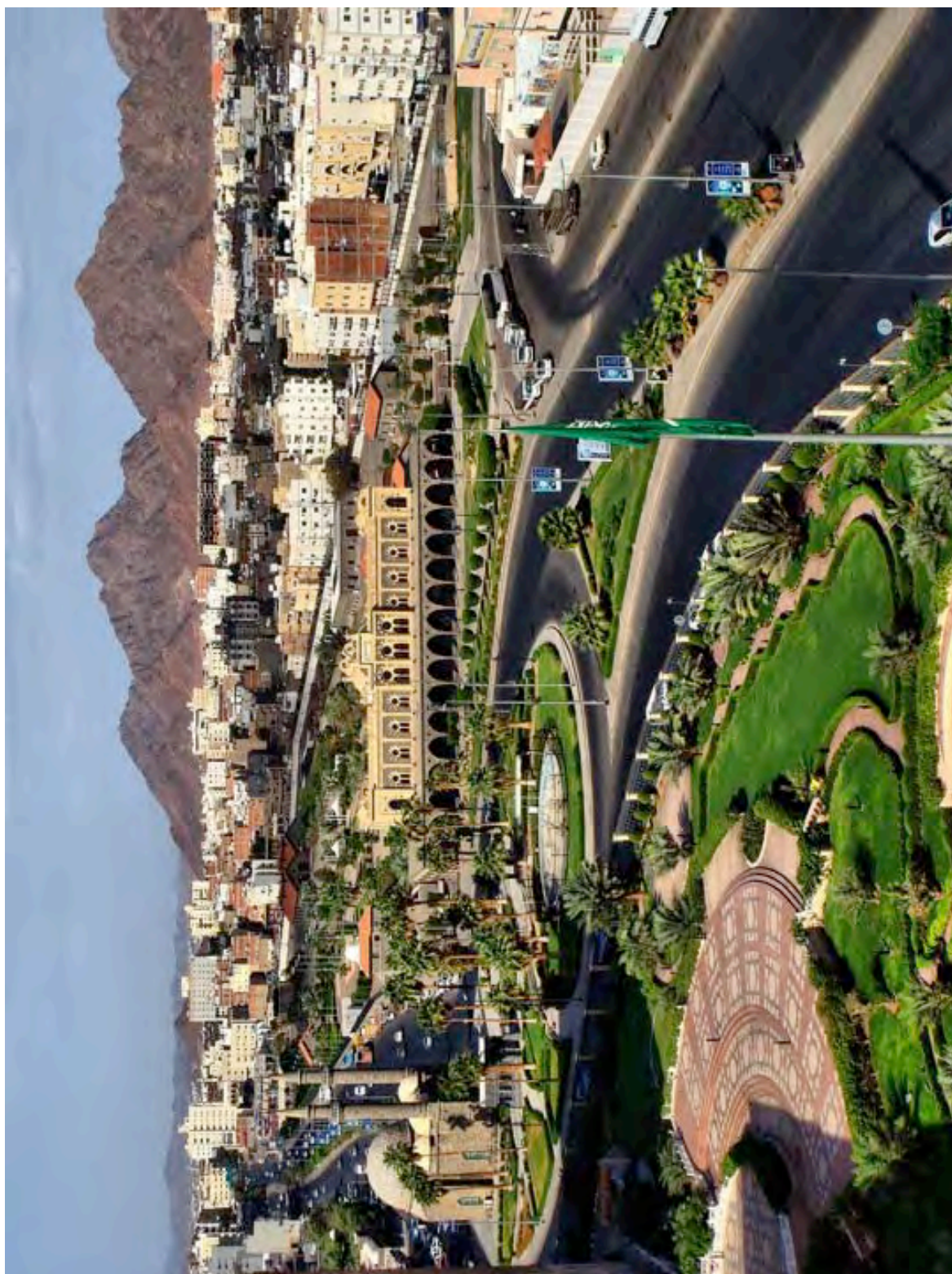


Fig. 5.108. Medina railway station and environs. Photograph: Ahmet Ersungur.



Fig. 5.109. Medina station, frontal view. Photograph: Ahmet Ersungur.



Fig. 5.110. Medina station, side view. Photograph: Mehmet Akif.

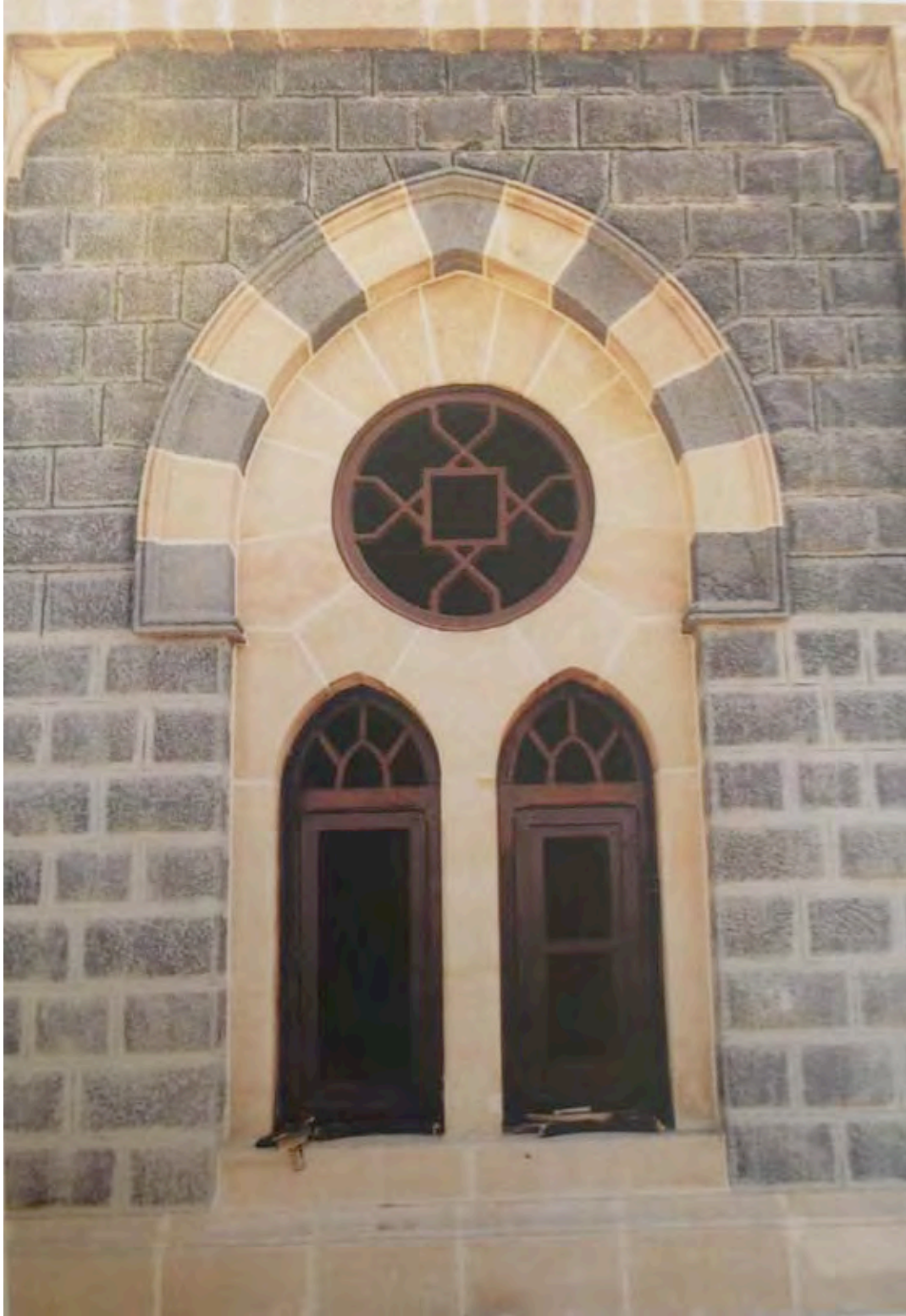


Fig. 5.111. Medina station, window detail. Photograph: James Nicholson.



Fig. 5.112. Medina station, capital detail. Photograph: James Nicholson.



Fig. 5.113. Postcard depicting the railway station at Haifa, c. 1902. Photograph: Regency Superior Auctions.

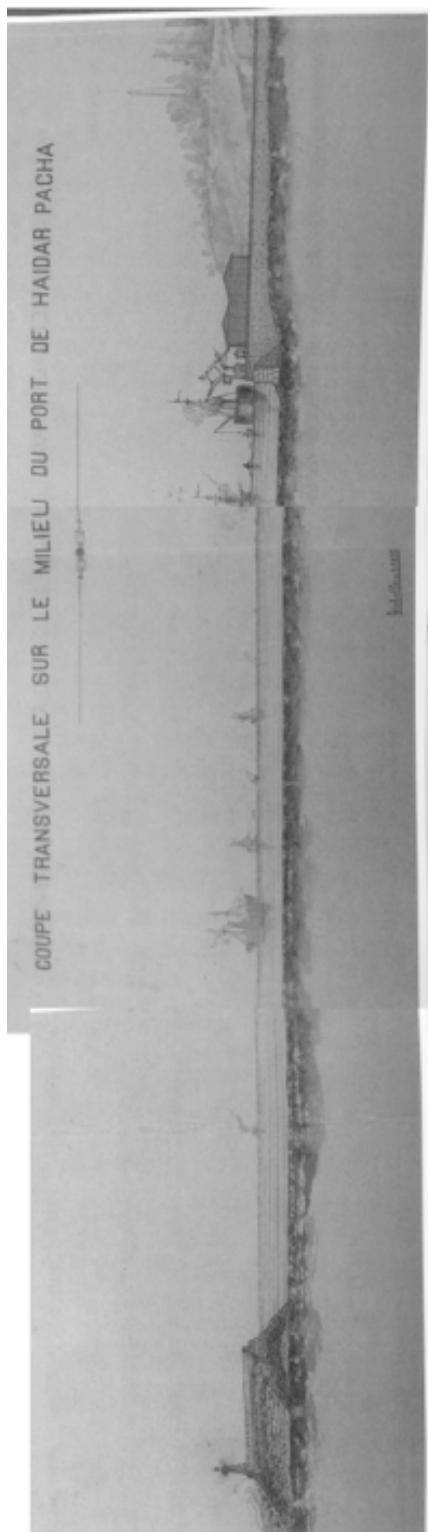


Fig. 5.114. “H.W.,” section of proposal for the port of Haydarpaşa, c. 1878. AA R14157.



Fig. 5.115. Postcard depicting the port of Haydarpaşa, c. 1878. Wikimedia Commons.



Fig. 5.116. Alexander Vallaury, ceremonial column on breakwater at Haydarpaşa. Photograph of the author.

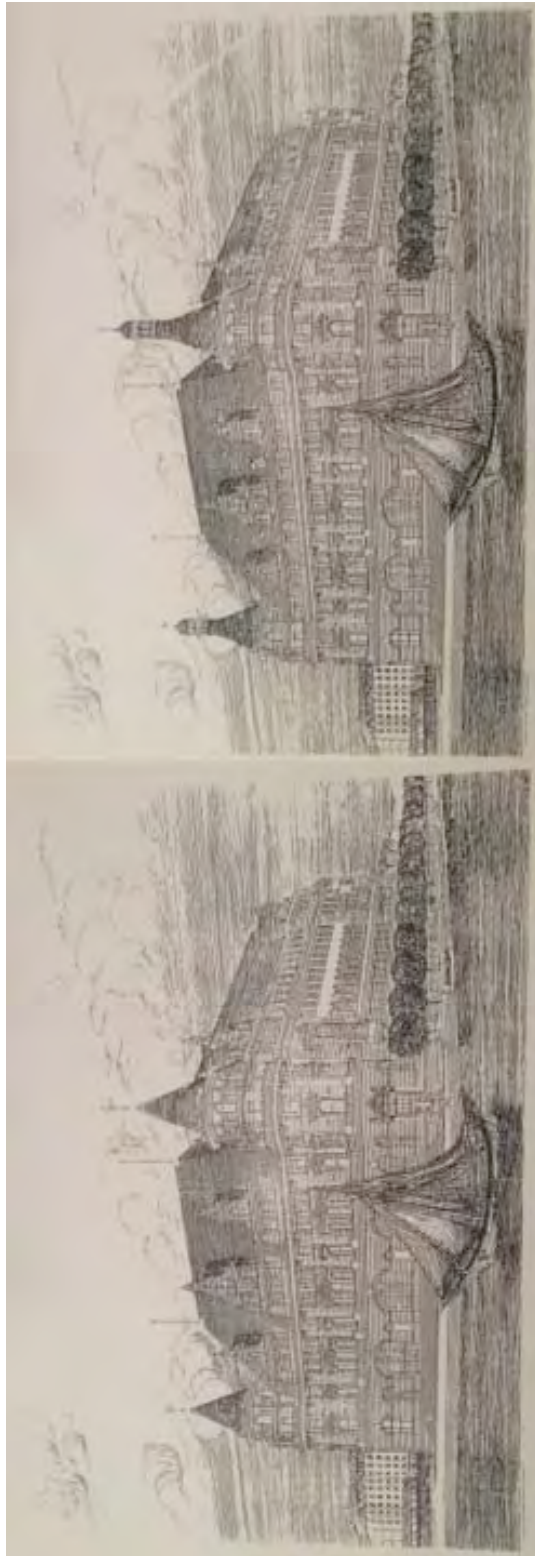


Fig. 5.117. Hellmuth Cuno for Philipp Holzmann GmbH, two designs for Haydarpaşa station, c. 1904. ISg FP003566 (left) and FP003565 (right).



Fig. 5.118. Haydarpaşa station, entry portal, detail showing the tuğra of Sultan Abdülhamid II. Photograph of the author.

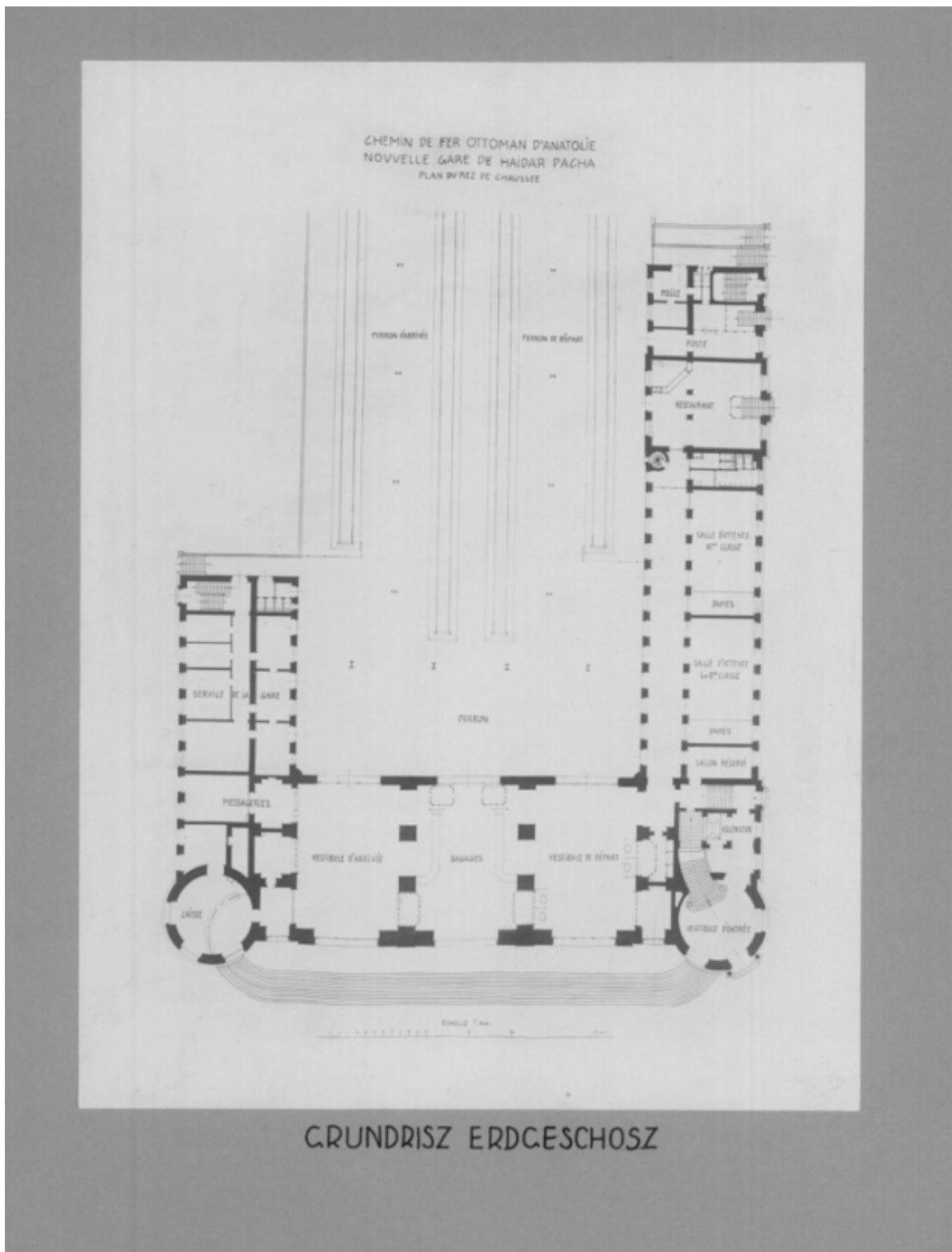


Fig. 5.119. Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, ground level plan. ISg W1/2 369.



Fig. 5.120. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of main façade. ISg W1/2 369.

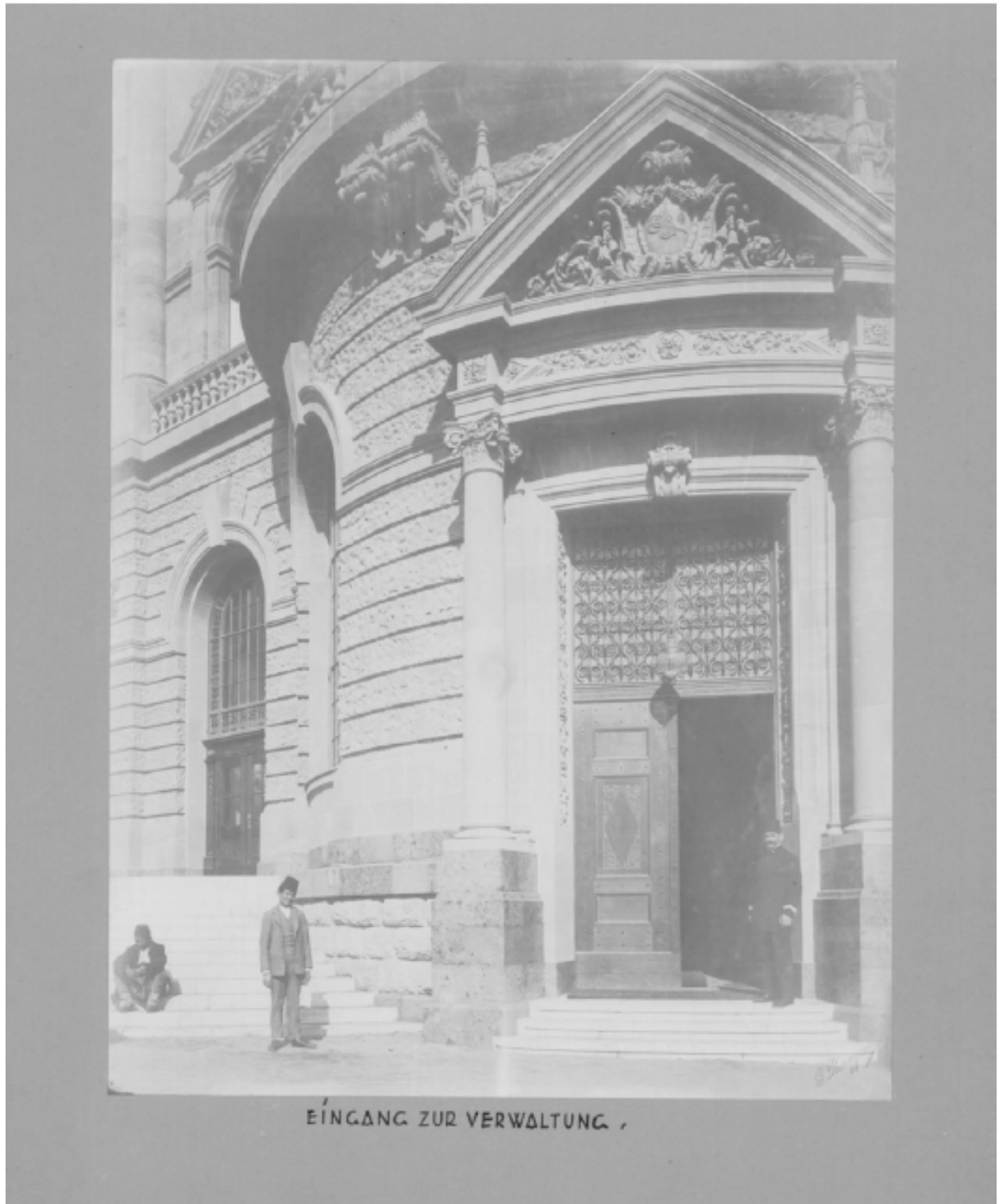


Fig. 5.121. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of administrative entry. ISg W1/2 369.



ERKER AM HAUPTTREPPENHAUS KADIKÖY-FLÜGEL,

Fig. 5.122. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, façade detail. ISg W1/2 369.

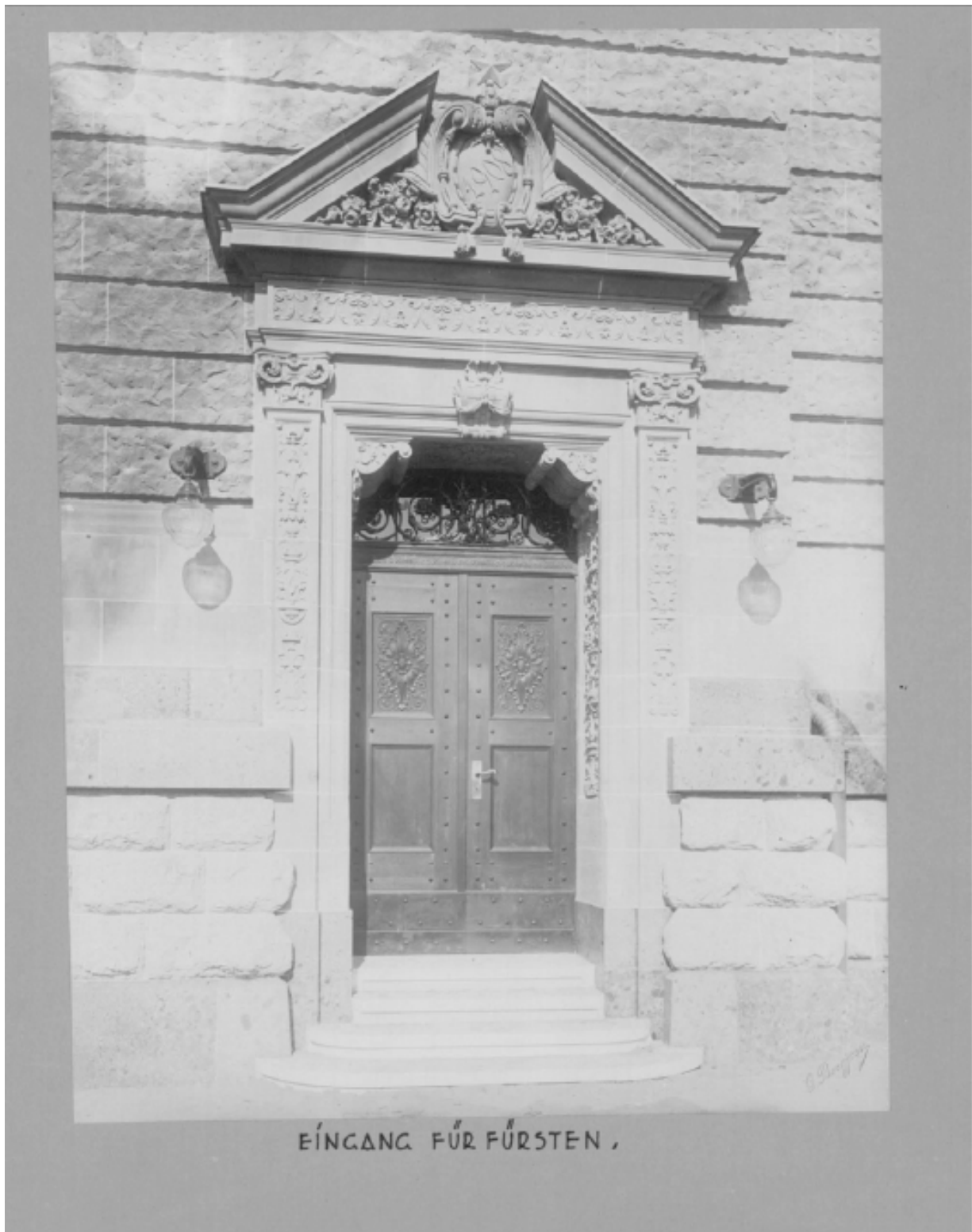


Fig. 5.123. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, façade detail. ISg W1/2 369.



Fig. 5.124. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of entry to post office. ISg W1/2 369.

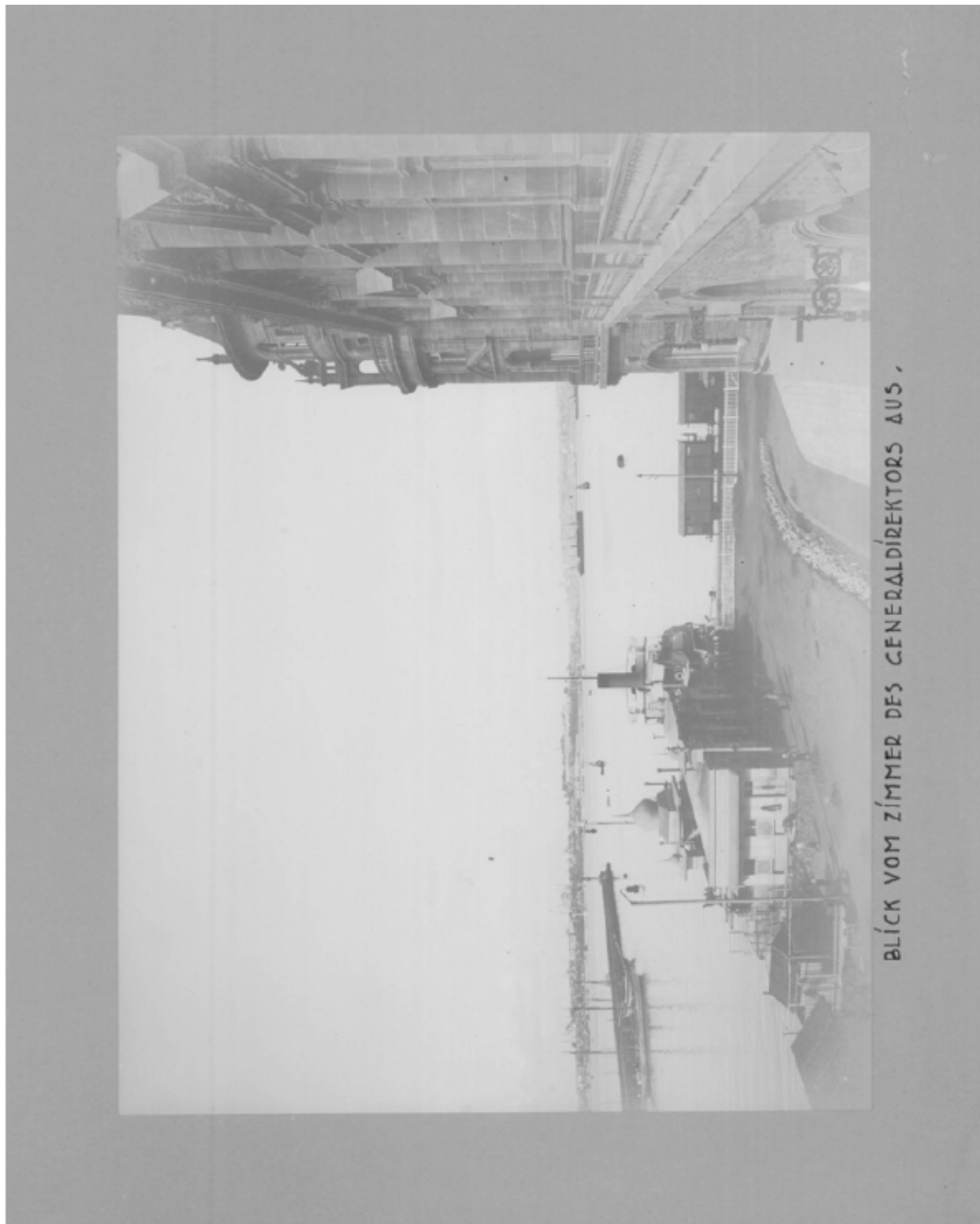
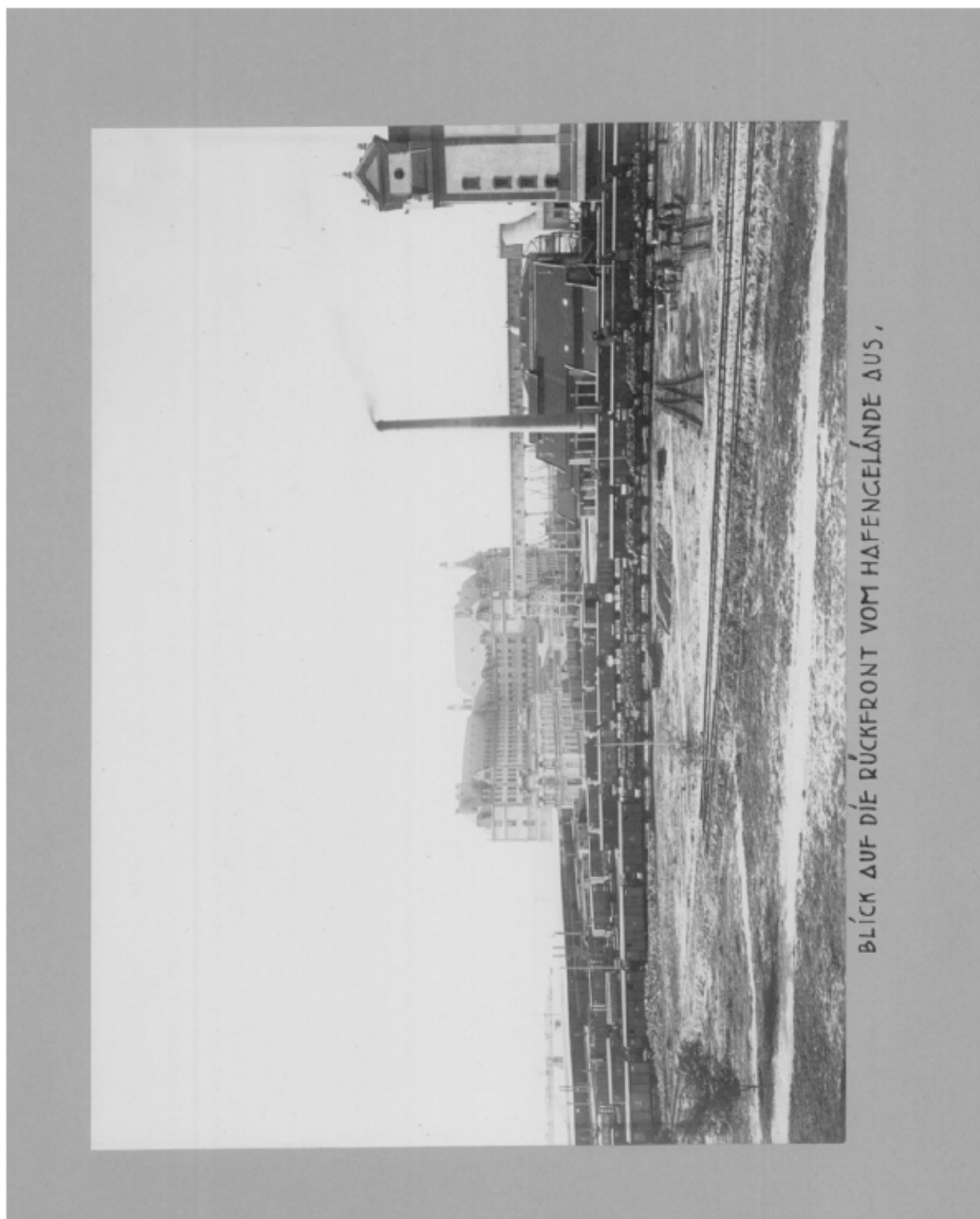


Fig. 5.125. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view towards Bosphorus. ISg W1/2 369.

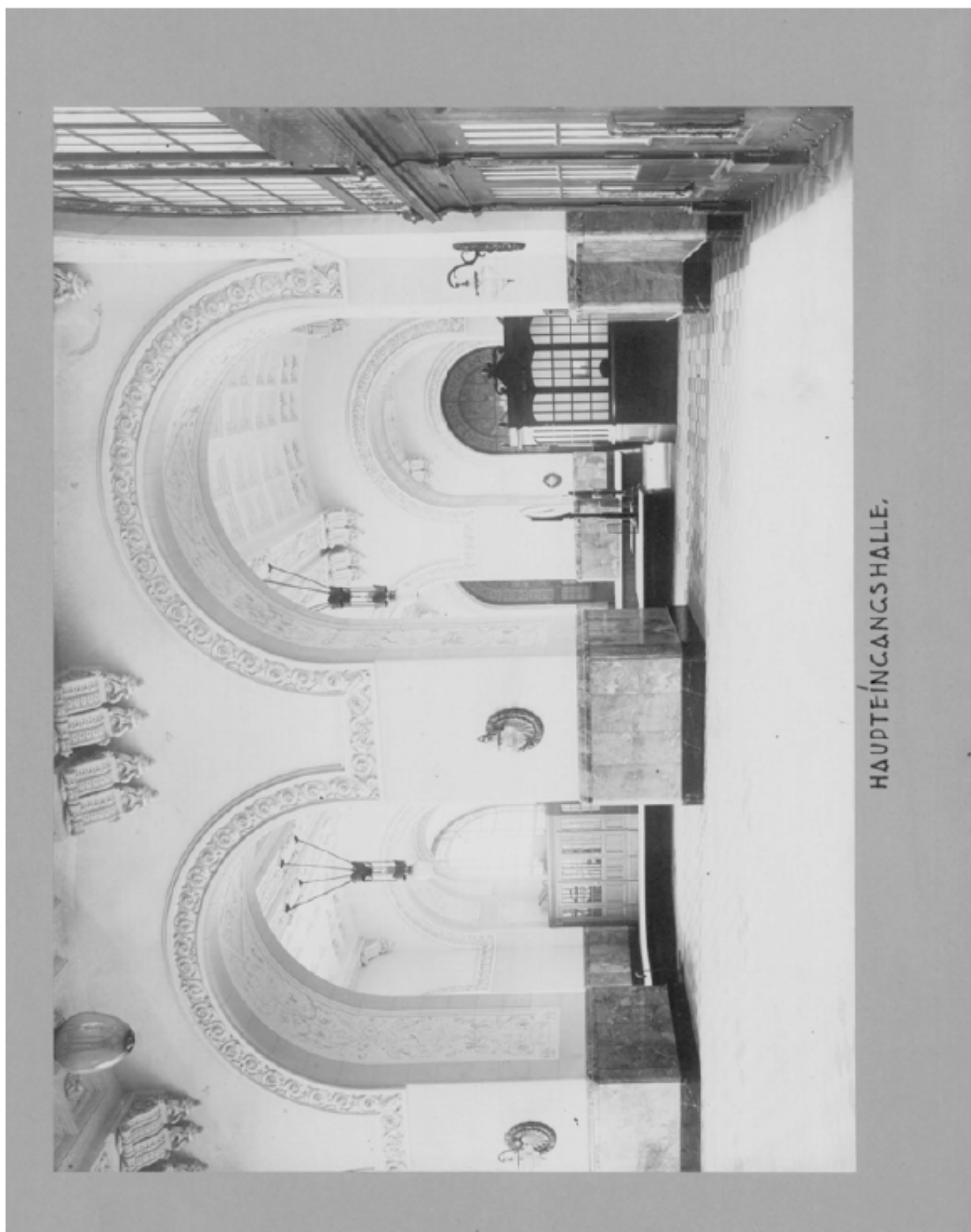


Fig. 5.126. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view towards Bosphorus. ISg W1/2 369.



BLICK AUF DIE RÜCKFRONT VOM HAFENGELÄNDE AUS,

Fig. 5.127. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view from railyards. ISg W1/2 369.



HAUPTEINGANGSHALLE,

Fig. 5.128. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of main hall. ISg W1/2 369.

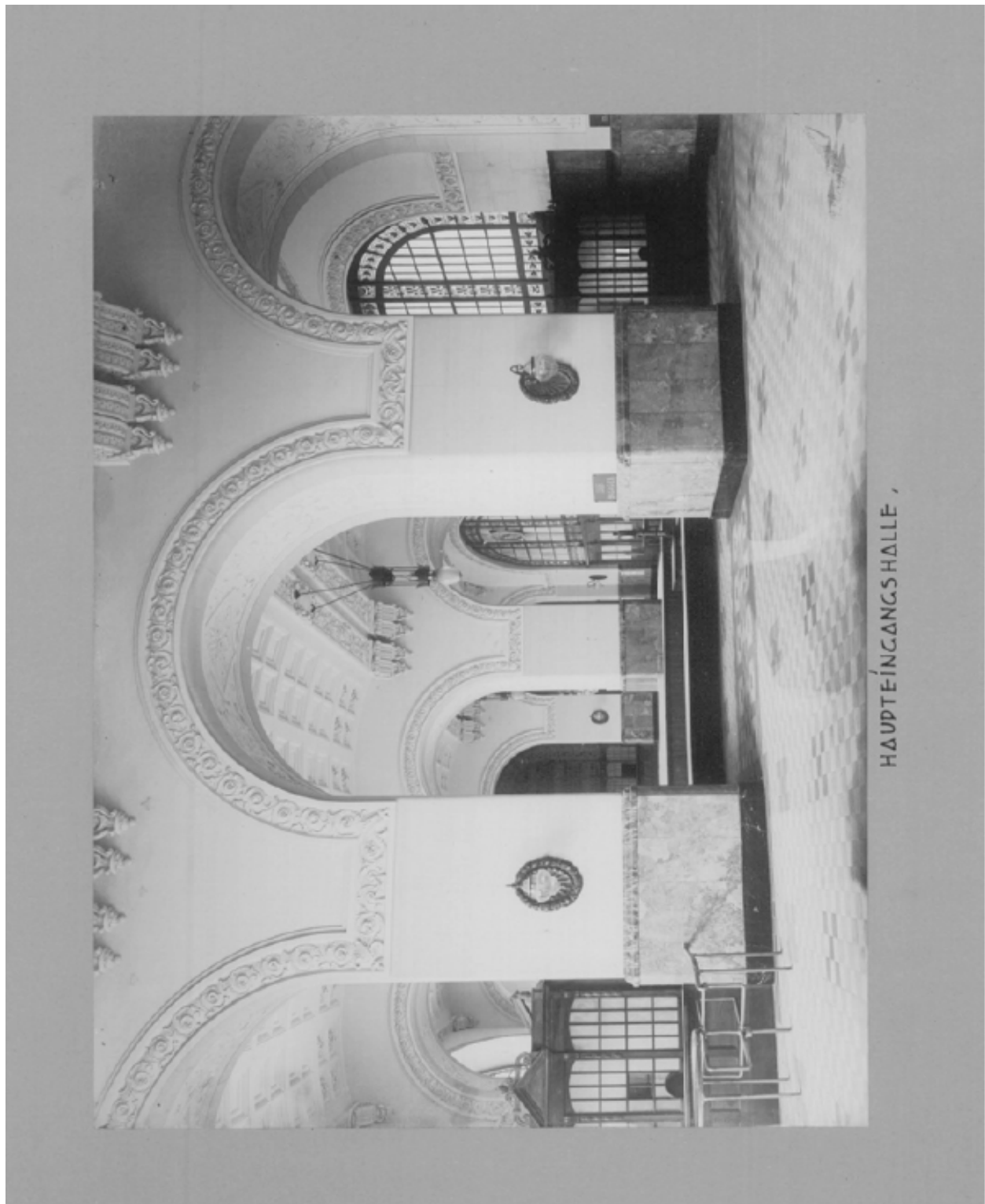


Fig. 5.129. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of main hall. ISg W1/2 369.

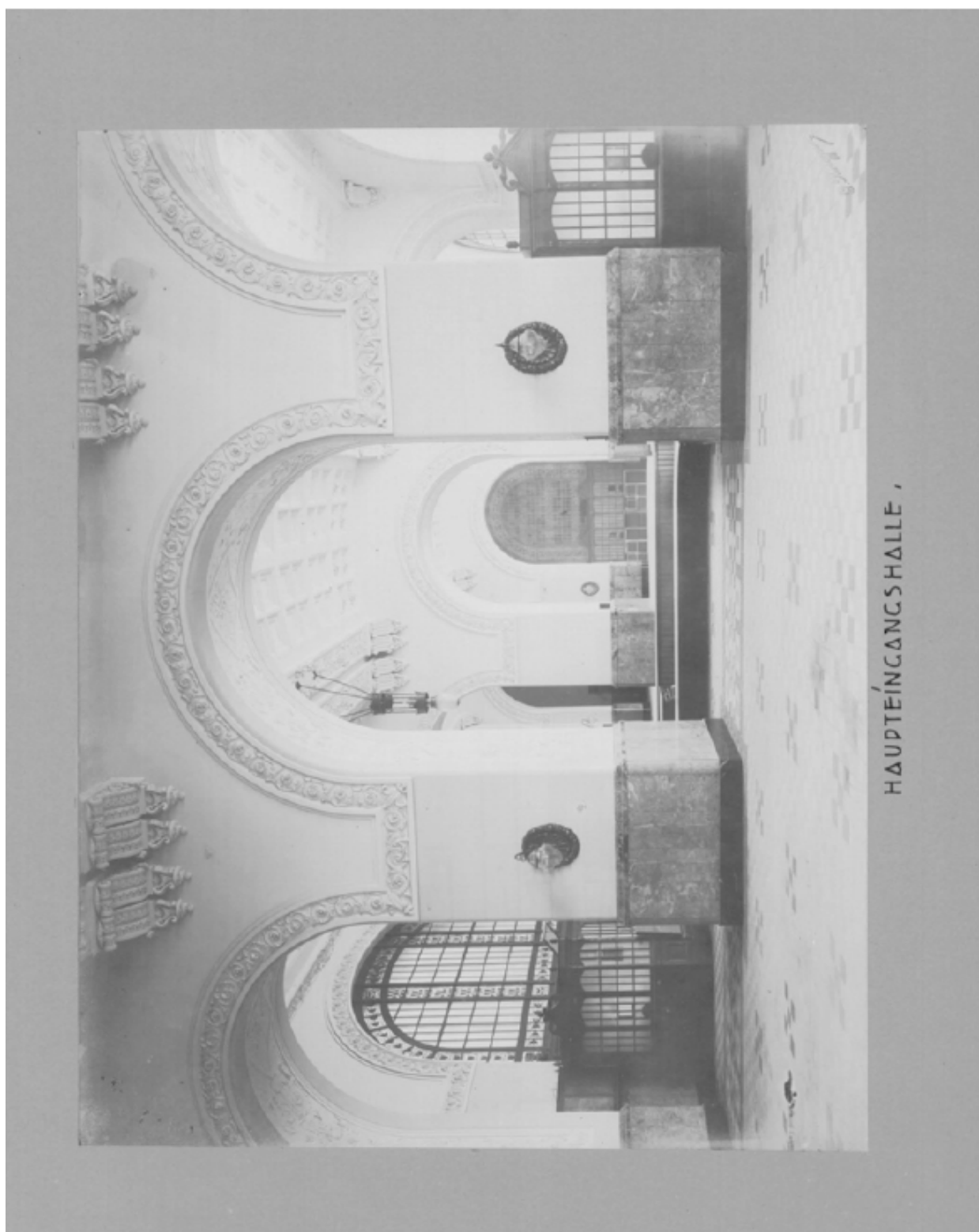


Fig. 5.130. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of main hall. ISg W1/2 369.

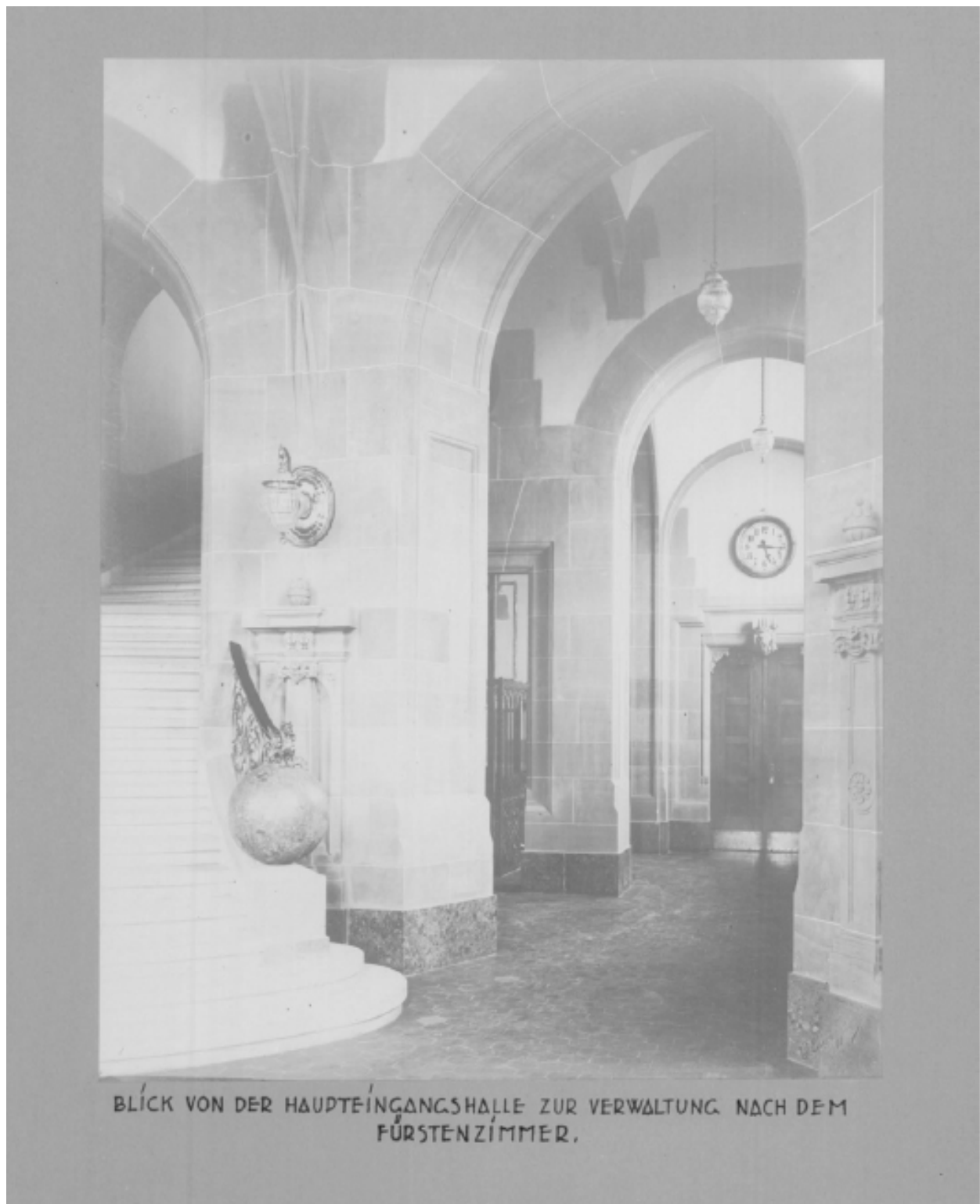


Fig. 5.131. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of administrative entry hall. ISg W1/2 369.



BLICK VON DER HAUPTTREPPE IN DIE EINGANGSHALLE .

Fig. 5.132. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, administrative stairway. ISg W1/2 369.



Fig. 5.133. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, administrative stairway. ISg W1/2 369.



Fig. 5.134. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, waiting room corridor. ISg W1/2 369.

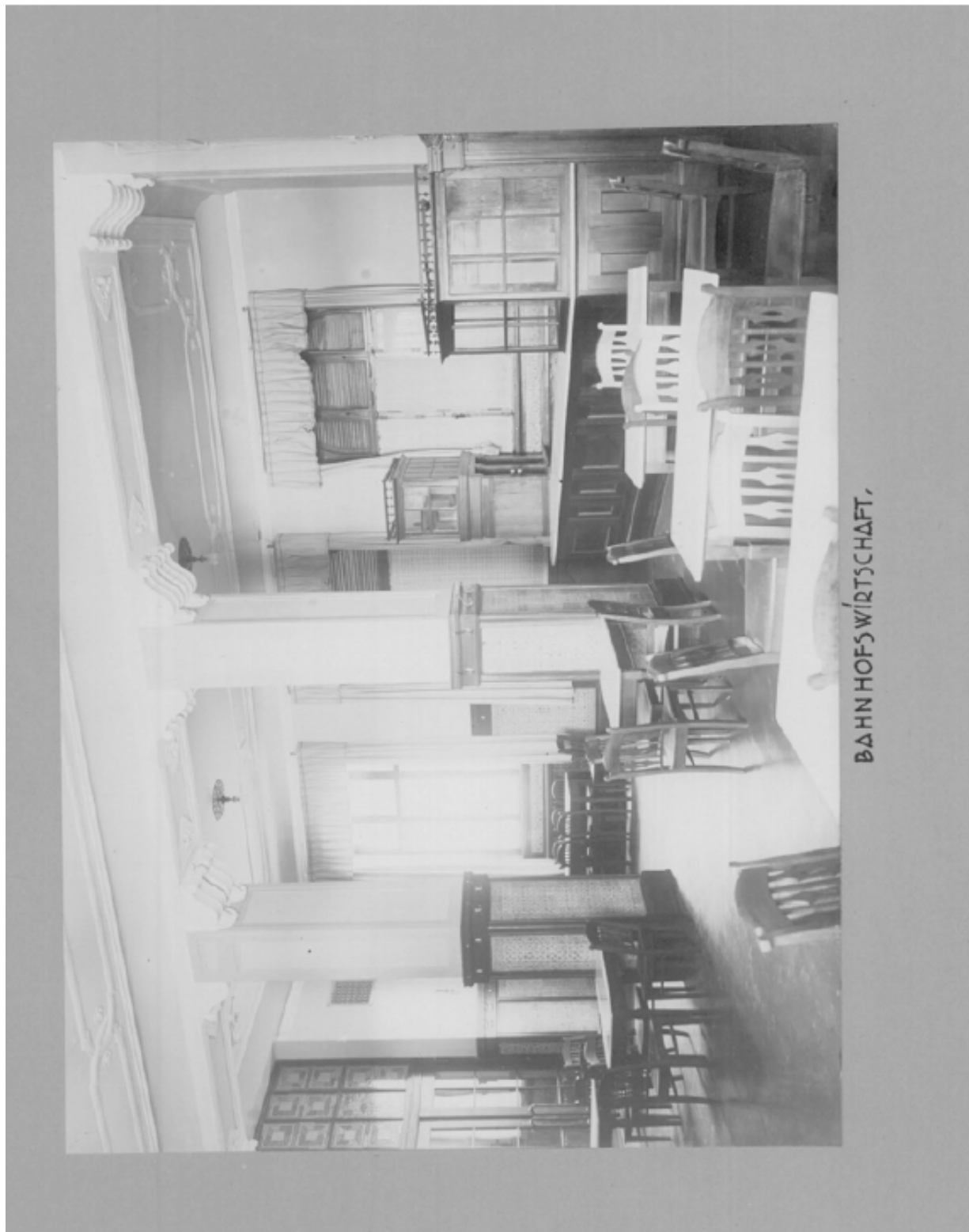


Fig. 5.135. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, restaurant. ISg W1/2 369.



Fig. 5.136. Haydarpaşa station, interior view, main hall, ceiling detail. Photograph of the author.

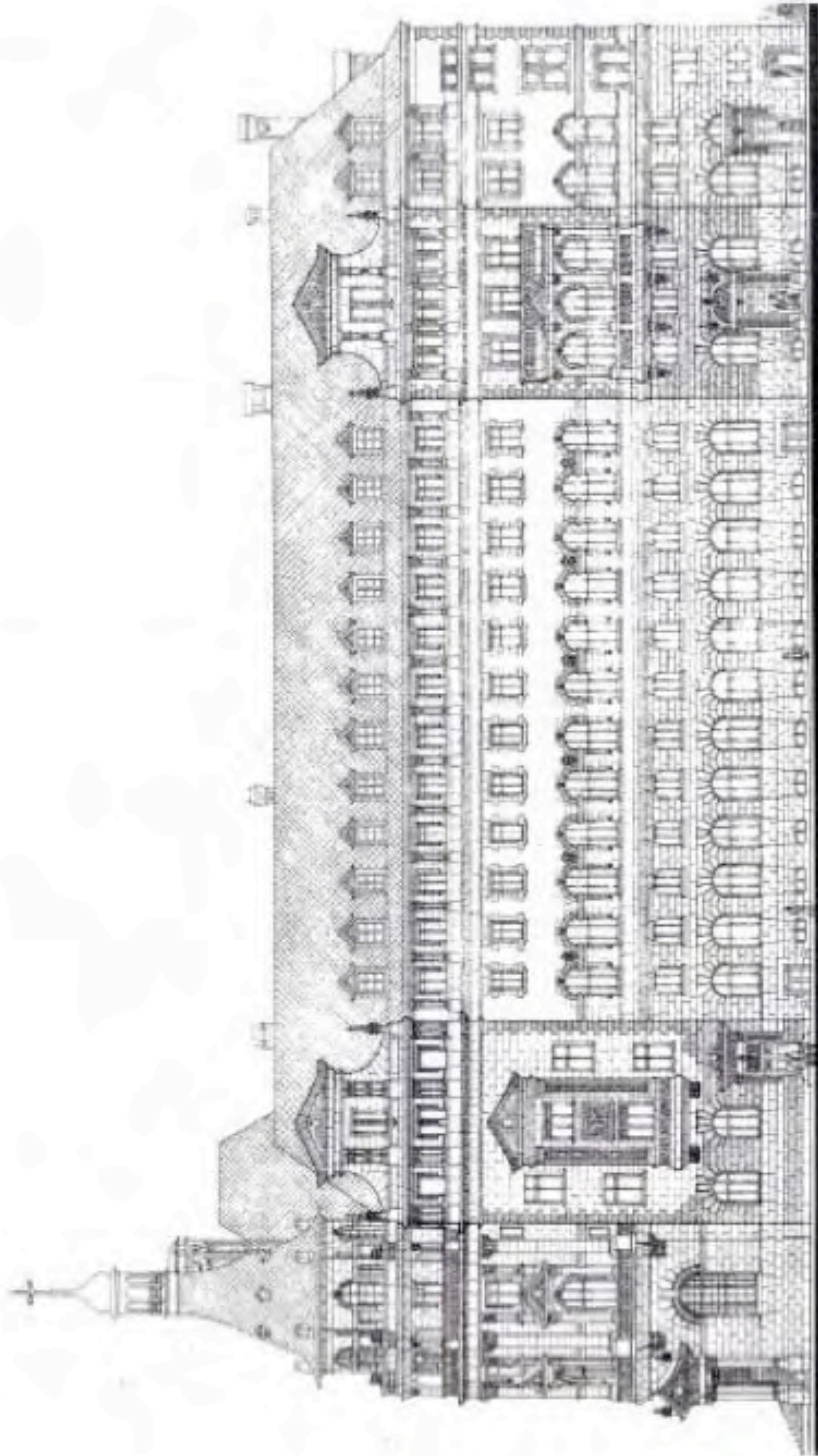


Fig. 5.137. Haydarpaşa station, east elevation. TCDD Haydarpaşa.

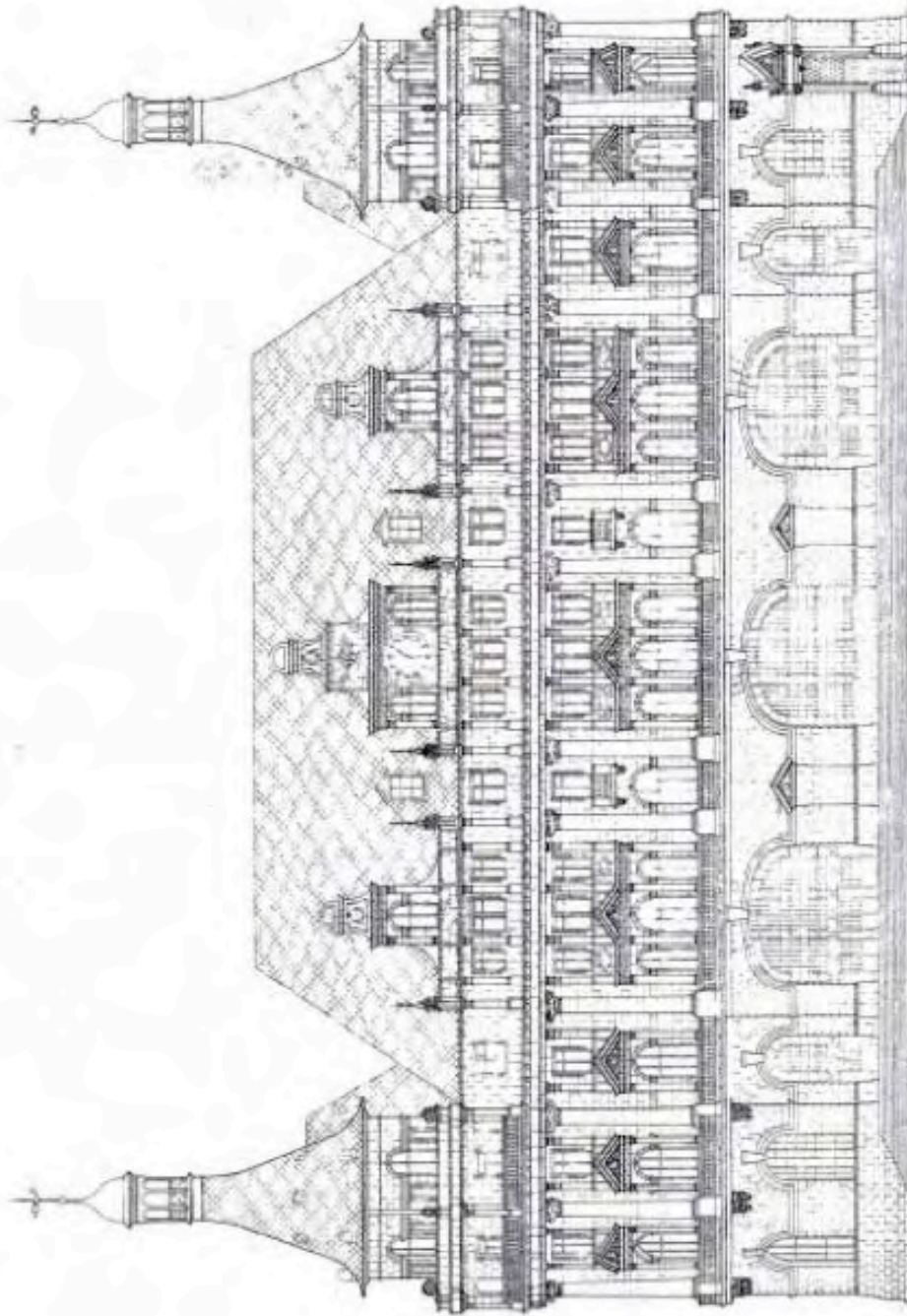


Fig. 5.138. Haydarpaşa station, main (northern) elevation. TCDD Haydarpaşa.

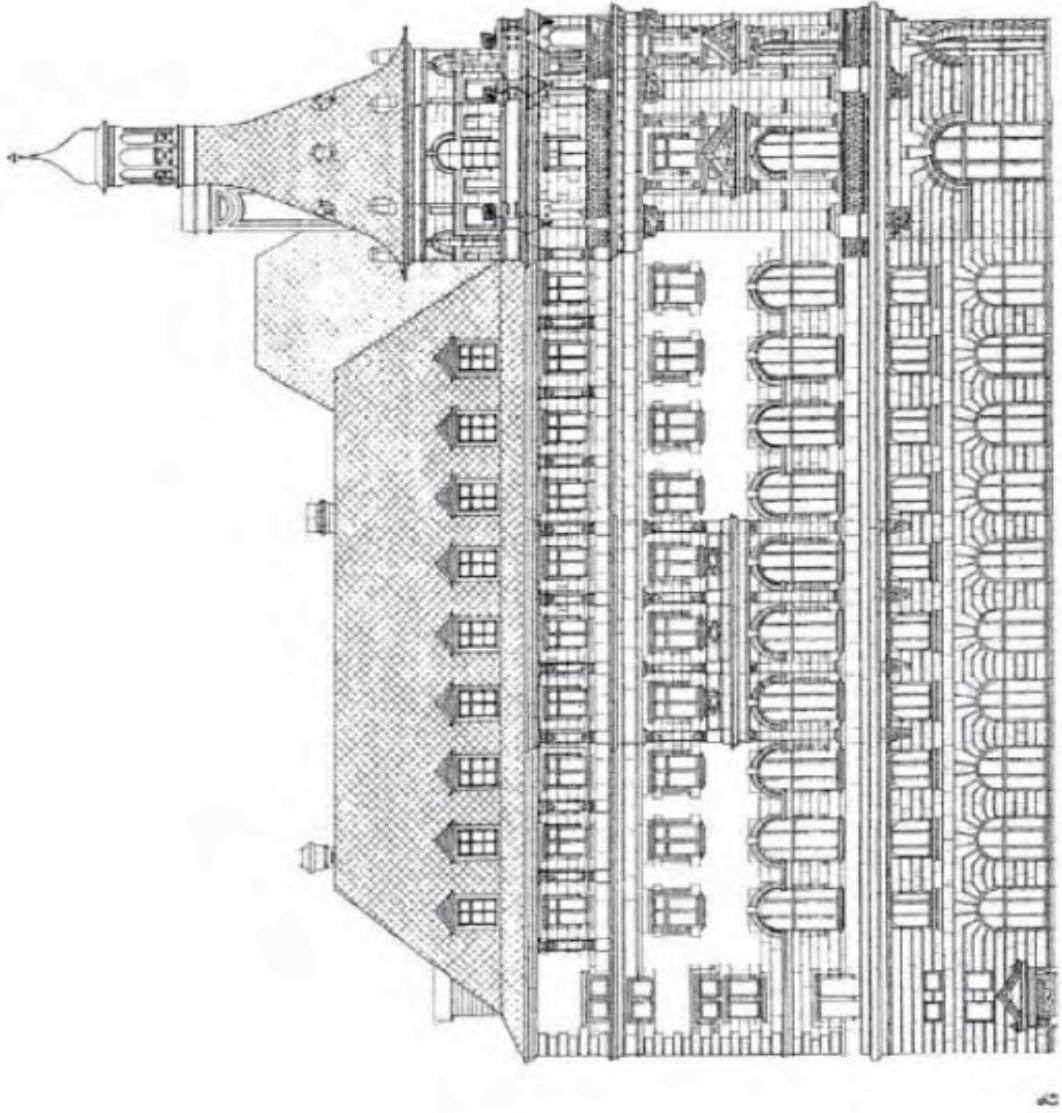


Fig. 5.139. Haydarpaşa station, west elevation (partial). TCDD Haydarpaşa.



Fig. 5.140. Haydarpaşa station, south tower detail. Photograph of the author.

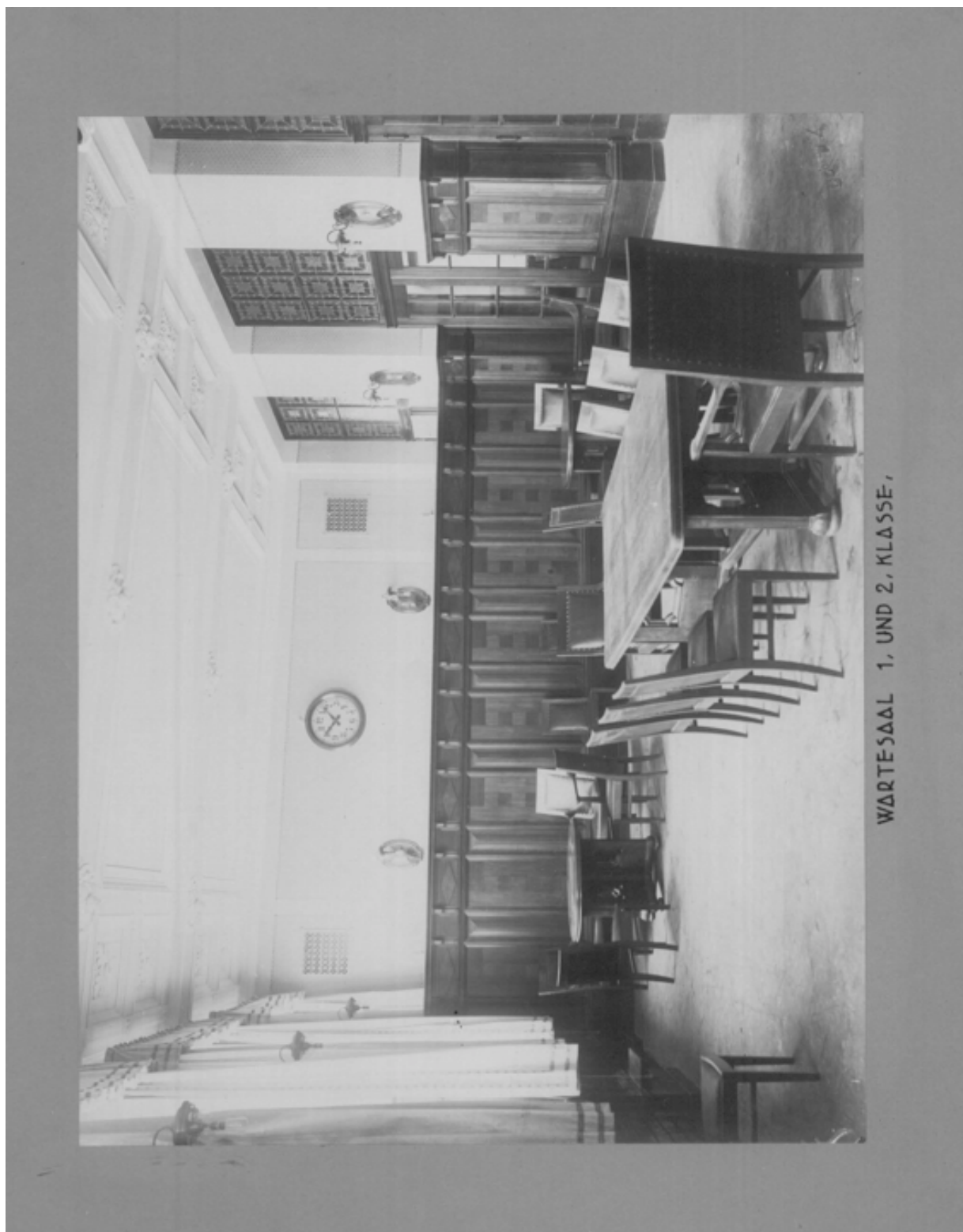


Fig. 5.142. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of first and second class waiting room. ISg W1/2 369.



Fig. 5.143. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of third class waiting room. ISg W1/2 369.

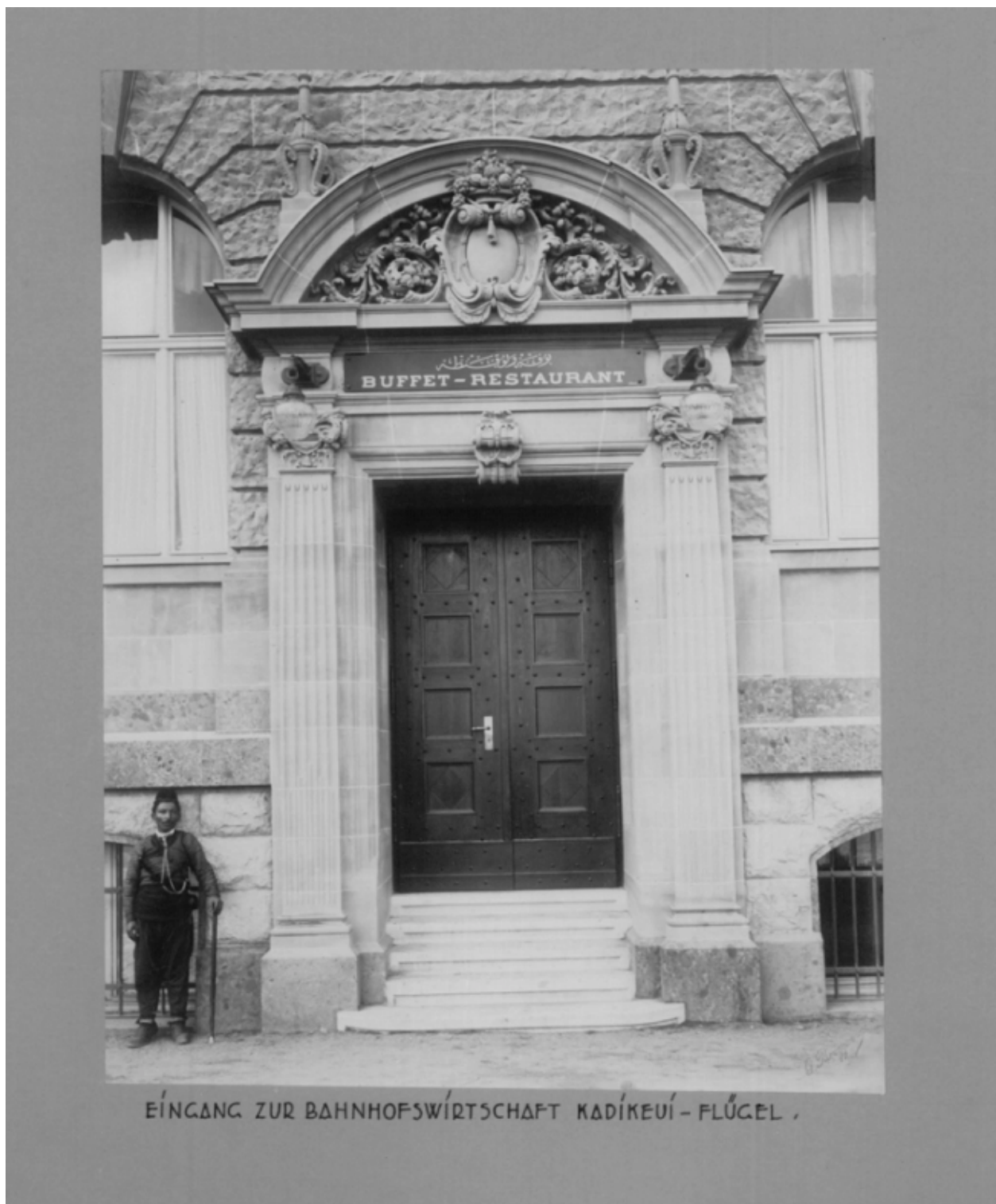


Fig. 5.144. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, saloon and restaurant entrance, Kadıköy (south) side. ISg W1/2 369.

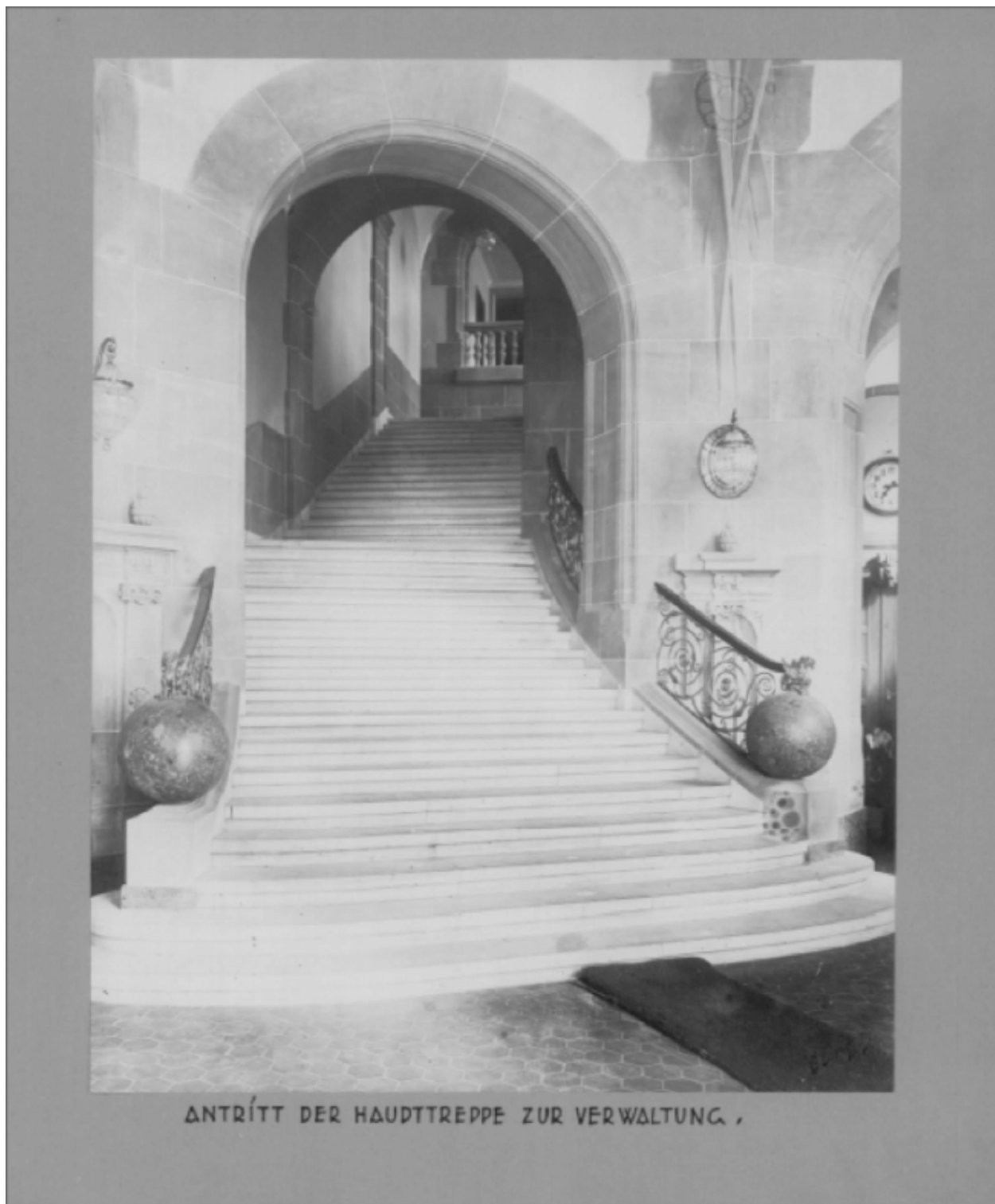


Fig. 5.145. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of stairwell in administrative sector. ISg W1/2 369.



Fig. 5.146. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of the General Director's office. ISg W1/2 369.

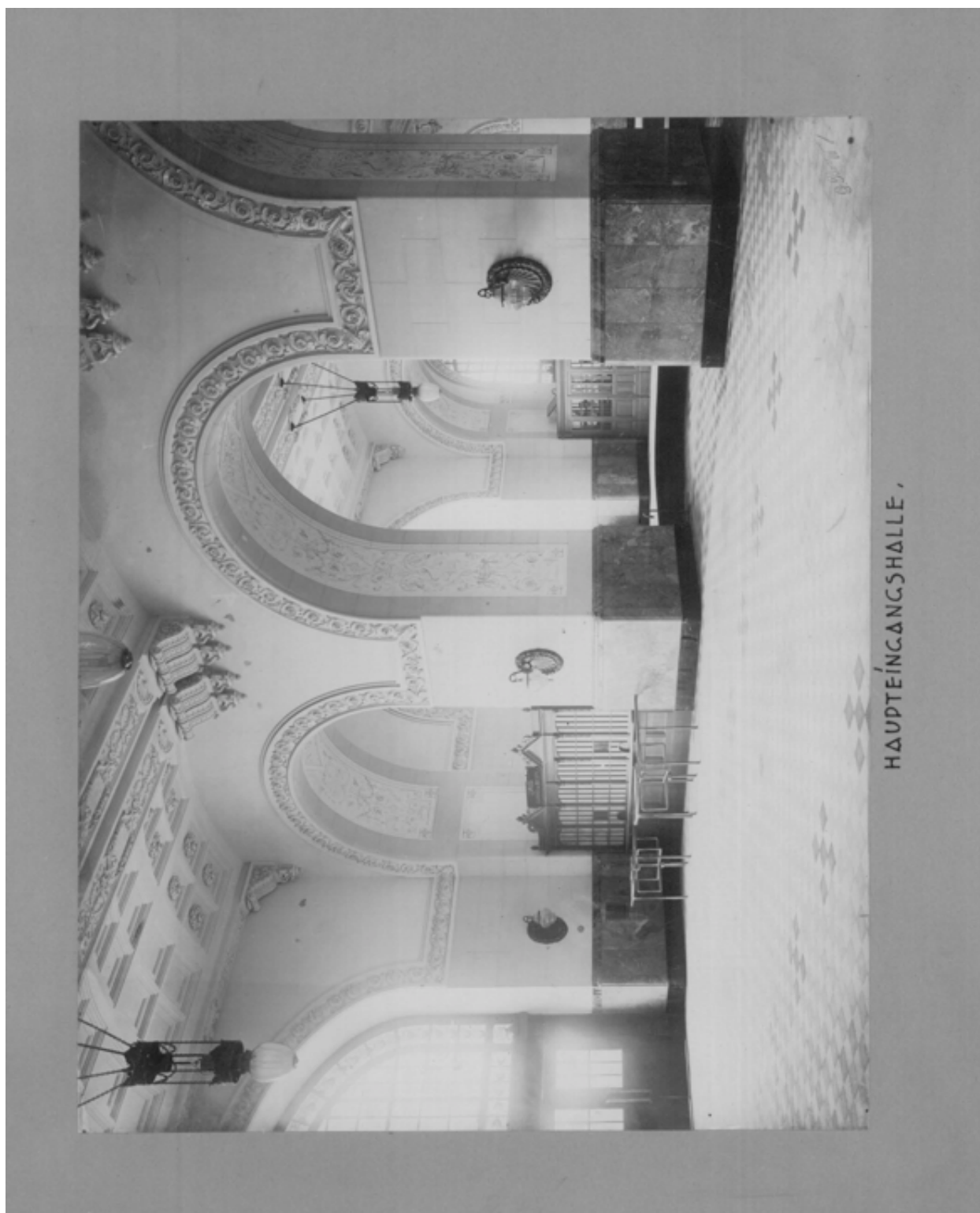


Fig. 5.147. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of main entry hall. ISg W1/2 369.

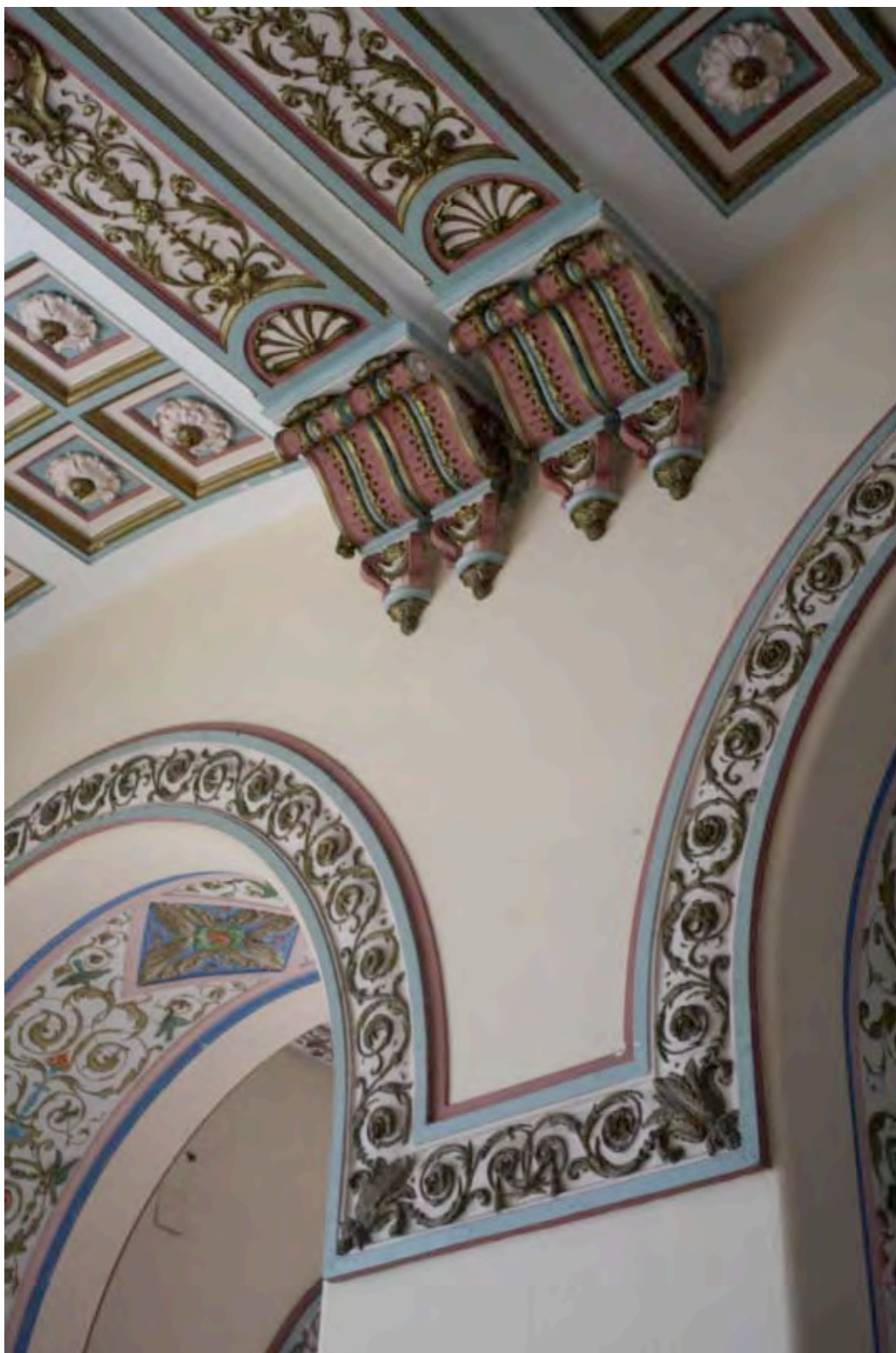


Fig. 5.148. Haydarpaşa station, main hall, detail of ornamental scheme. Photograph of the author.



Fig. 5.149. Haydarpaşa station, front entry, detail of doors and stained glass. Photograph of the author.

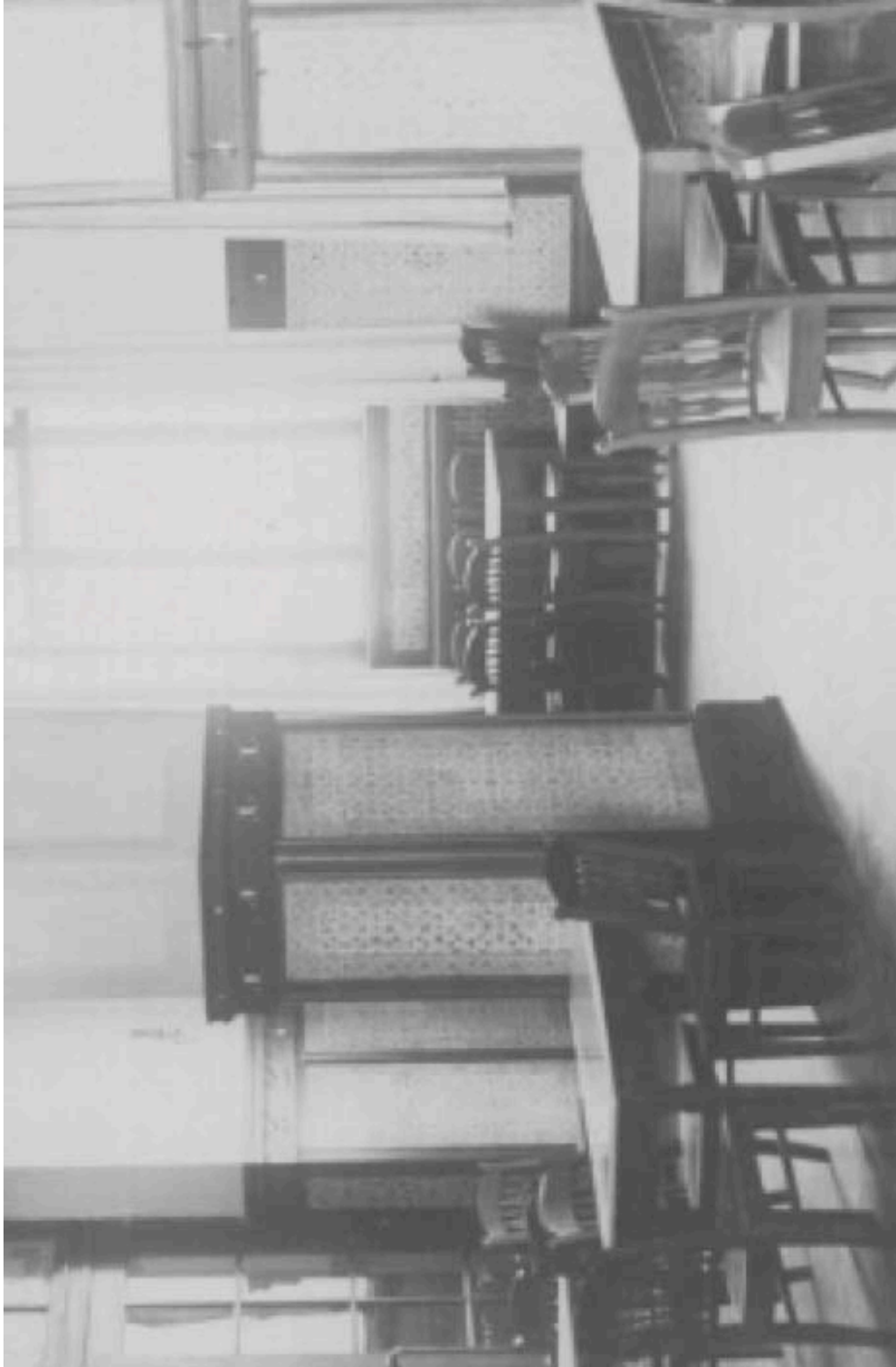


Fig. 5.150. Guillaume Gustave Berggren, Hellmuth Cuno for Philipp Holzmann GmbH, Haydarpaşa station, view of restaurant and tiled walls (detail). ISg W1/2 369.



Fig. 5.151. Ayrançiderbent station, ticket window (detail). Photograph: Mehmet Yavuz.



Fig. 5.152. Guillaume Gustave Berggren, Ereğli station, view from south. Wikimedia Commons.



Fig. 5.153. Eregli station, exterior view, engineer or stationmaster's house. Photograph of the author.



Fig. 5.154. Ulukışla station, detail of worker's house. Photograph of the author.



Fig. 5.155. Ulukışla station, worker's house. Photograph of the author.

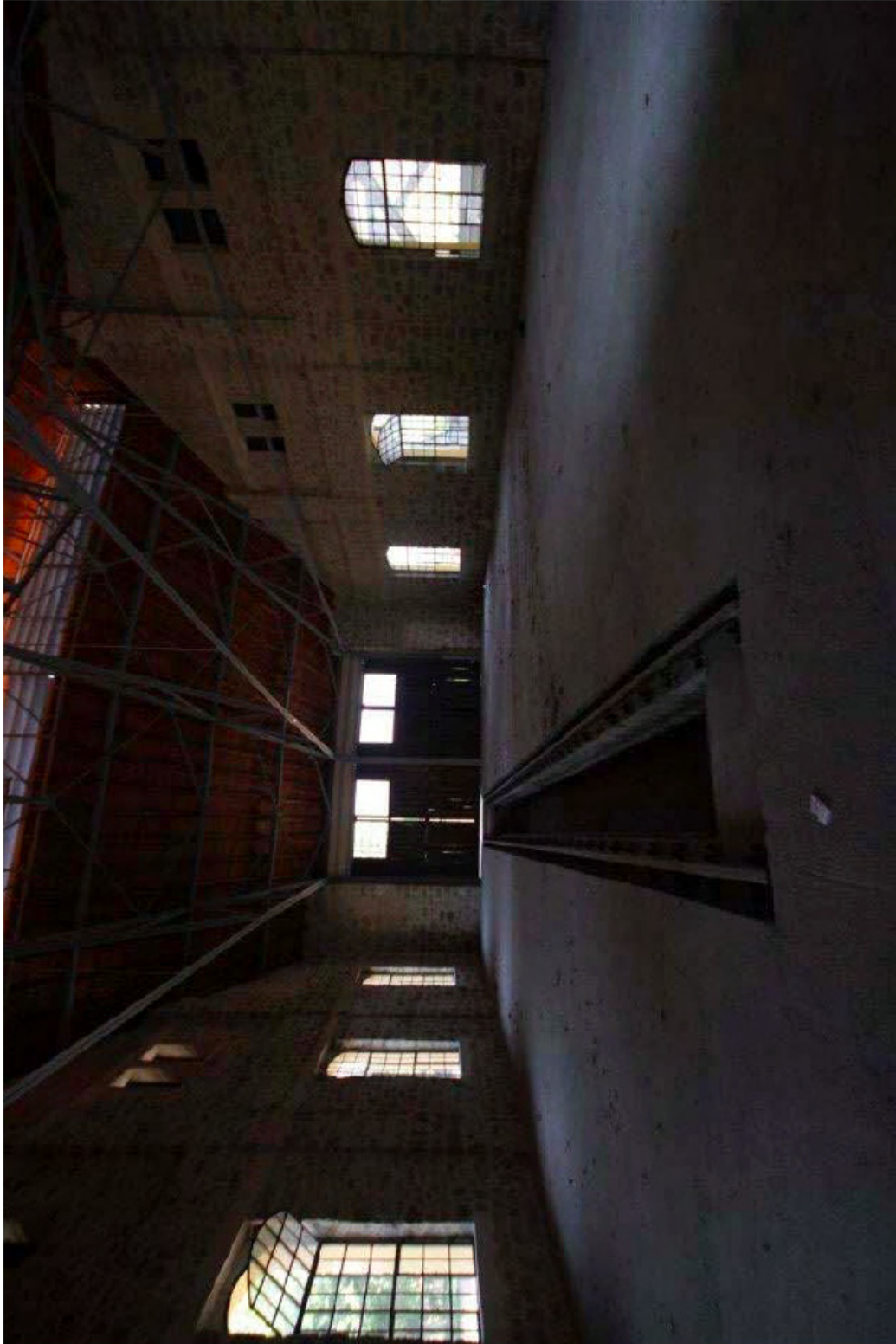


Fig. 5.156. Pozantı station, interior view, depot. Photograph of the author.



Fig. 5.157. Pozantı station, interior view, depot. Photograph of the author.



Fig. 5.158. Pozantı station, exterior view, depot. Photograph of the author.



Fig. 5.159. Durak station, track side. Photograph of the author.



Fig. 5.161. Durak station, railside portico. Photograph of the author.



Fig. 5.162. Durak station, exterior view, northern façade. Photograph of the author.



Fig. 5.163. Durak station, eave detail. Photograph of the author.



Fig. 5.164. Dörtyol station, eave detail. Photograph of the author.



Fig. 5.165. Unknown, postcard view of Dörtyol station, c. 1912. Wikimedia Commons.



Fig. 5.166. Fevzipaşa station, track side. Photograph: Demiryolcuyuz.



Fig. 5.167. Toprakkale, exterior view, workshop. Photograph of the author.



Fig. 5.168. Yenice station, view from west. Photograph of the author.



Fig. 5.169. Iskenderun station, street side. Photograph of the author.

Francis & A. M. le 19 Mars 1914
Société pour la Construction
du Chemin de Fer en Turquie
Les ingénieurs et Architectes
Riese

Dr. FERDINAND EDLMANN & CO
Architekten-Ingénieur
Hellmuth Cuno

Fig. 5.170. Signatures of Otto Riese (above) and Hellmuth Cuno (below) on the Cilician station drawings. TCDD 10 A-154/1.



Fig. 5.171. Adana station, exterior view, street side. Photograph of the author.

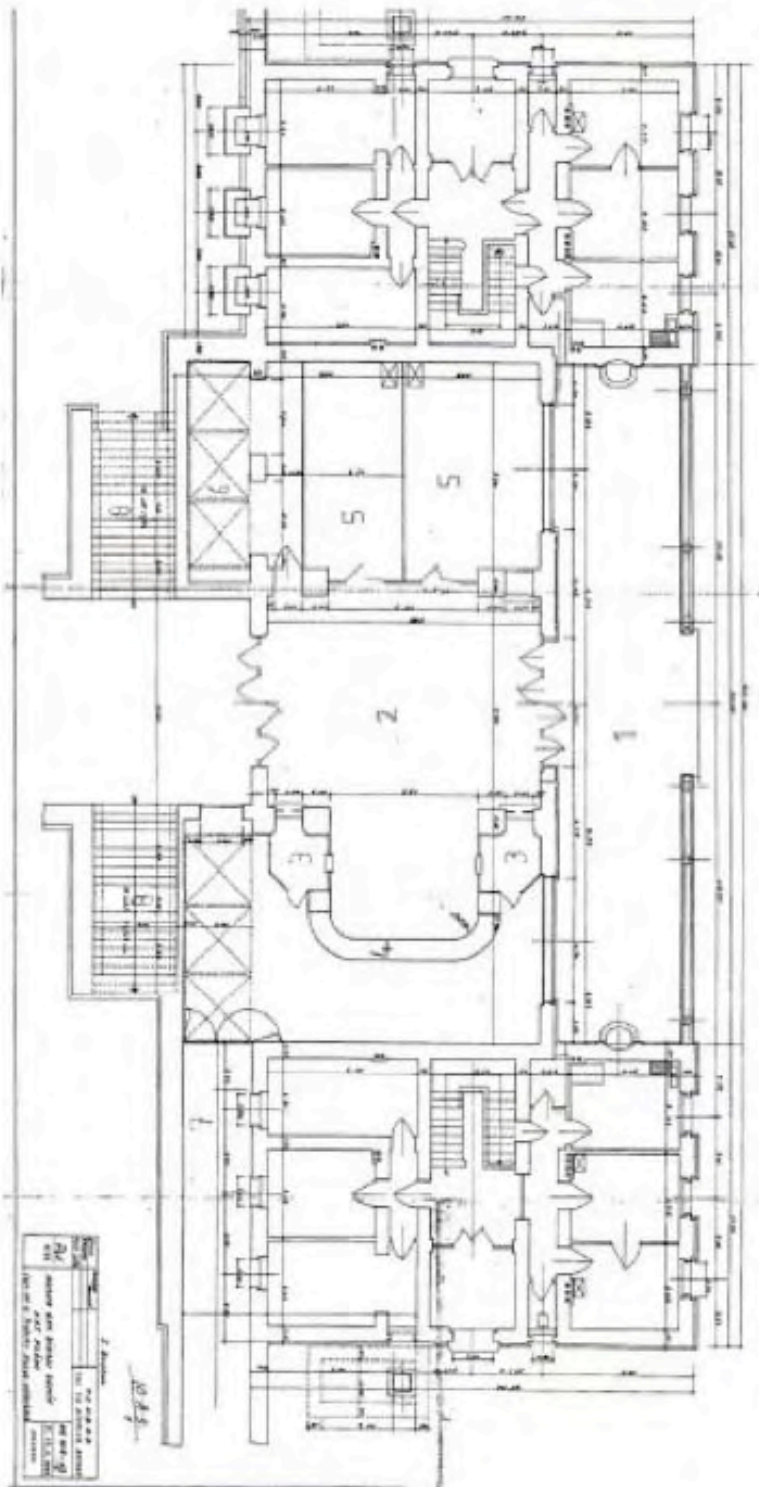


Fig. 5.172. Adana station, plan, ground level. TCDD 10 A-5/4.

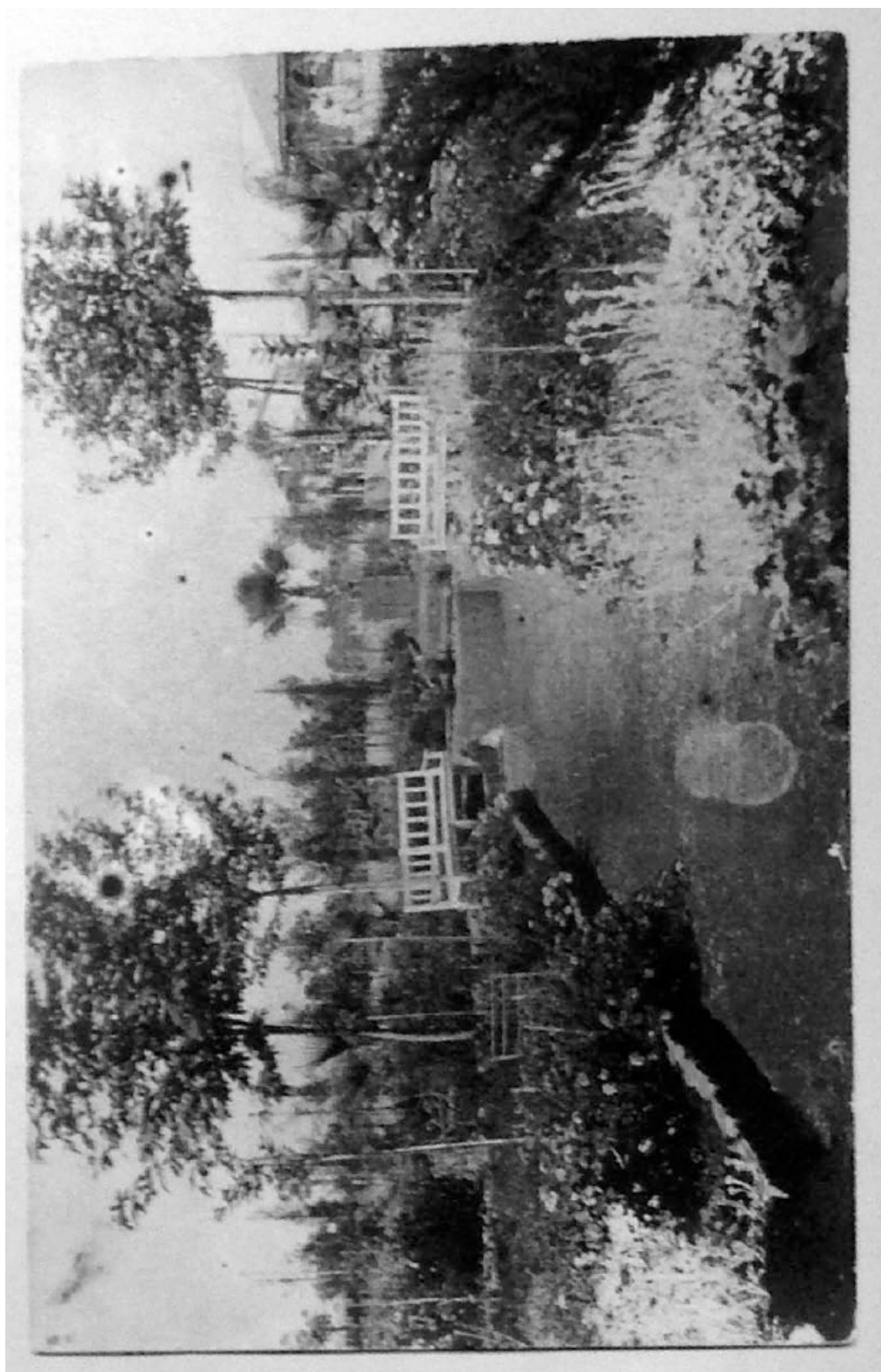


Fig. 5.173. Unknown, Heubusch family garden in Adana, 1917. SAS.



Fig. 5.174. Unknown, engineer Emil Heubusch and his wife in their garden in Adana, 1917. SAS.



Fig. 5.175. Adana station, ticket window detail. Photograph of the author.



Fig. 5.176. Adana station, eave detail. Photograph of the author.



Fig. 5.177. Adana station, exterior niche detail (former location of a fountain). Photograph of the author.



Fig. 5.178. Adana station, exterior view, stationmaster's house. Photograph of the author.

Bâtiment à voyageurs 1^{re} classe. Type II.

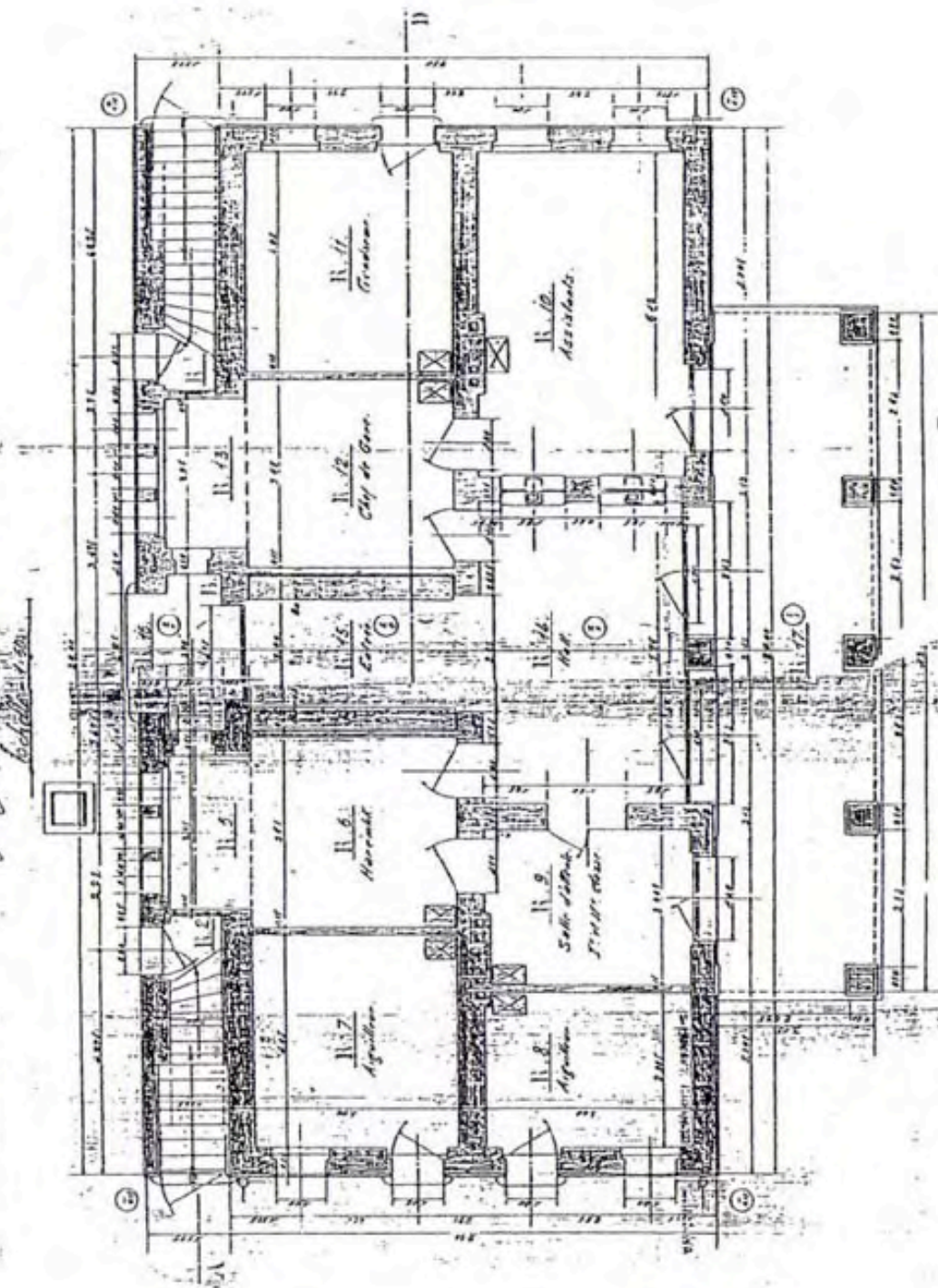


Fig. 5.179. Yenice station, plan. TCDD 10 A-940/1.

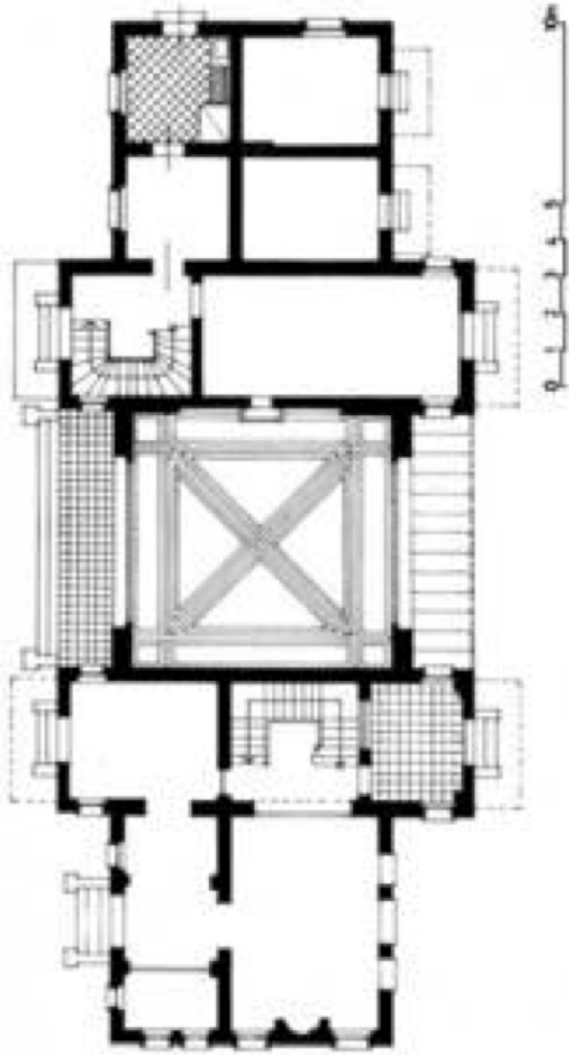


Fig. 5.180. Gazi Paşa (Ankara) station, plan. Published in Mehmet Emin Başar, Hacı Abdullah Erdoğan, “Osmanlı’dan Cumhuriyet’e Türkiye’de Tren Garları,” S.Ü. Müh. - *Mim. Fak. Dergisi*, 24, no. 3 (2009), 36.

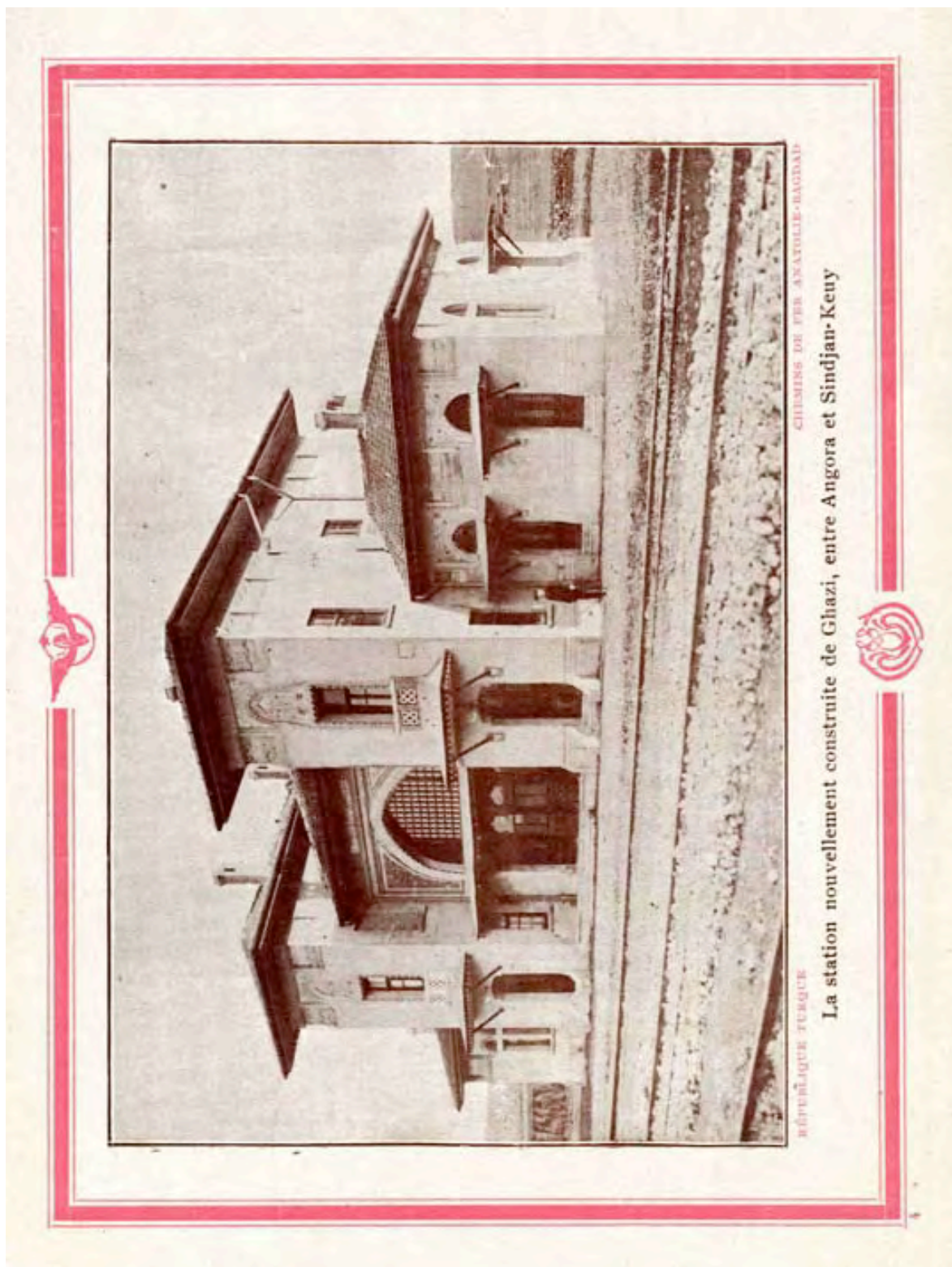


Fig. 5.181. View of Gazi Paşa (Ankara) station. Harvard University Libraries.



Fig. 5.182. Nusaybin station, track side. Photograph: Mehmet Yavuz.

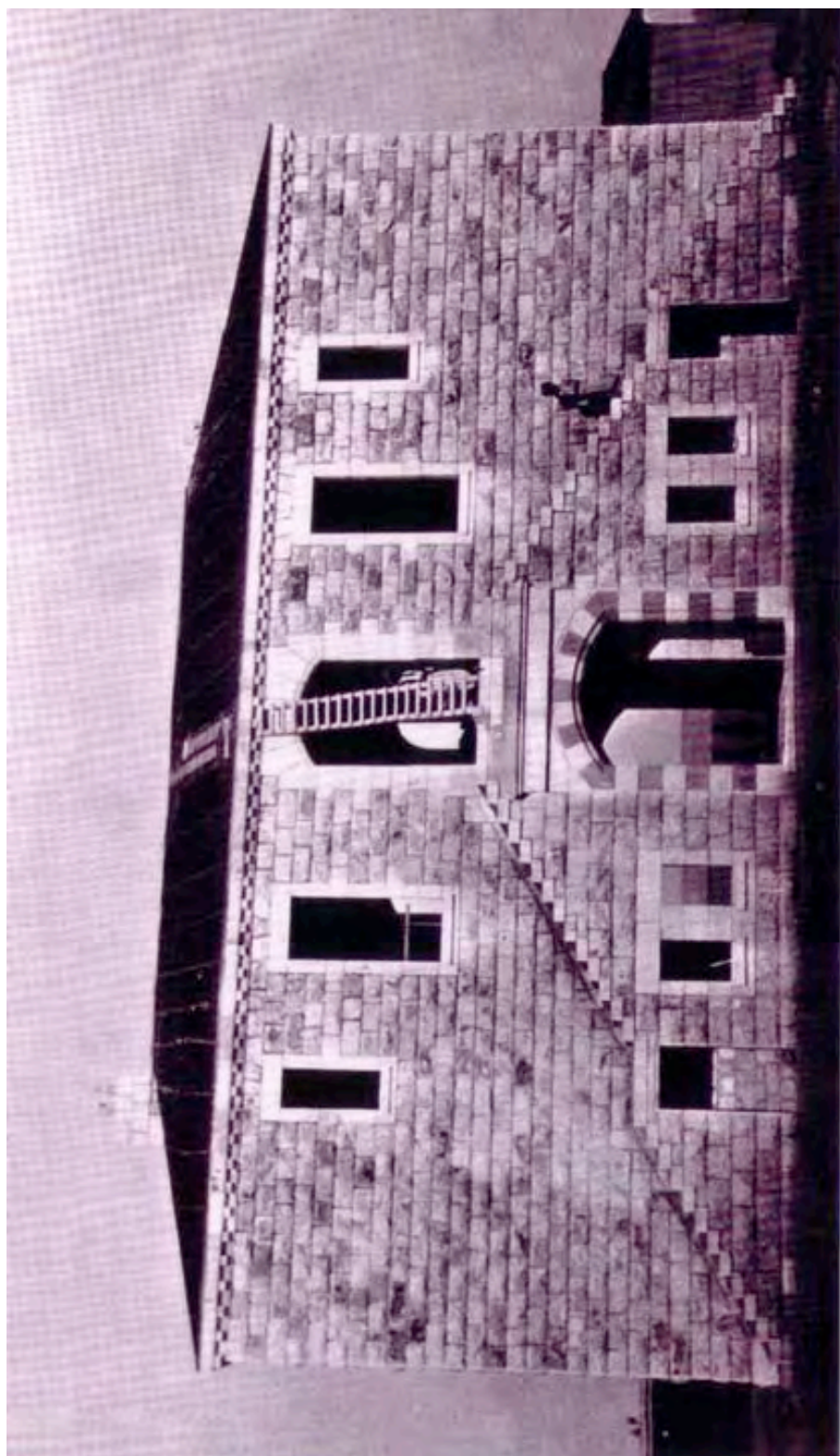


Fig. 5.183. Unknown, Carchemish station, city side, under construction, c. 1913. SOHA MvO29.15.6.

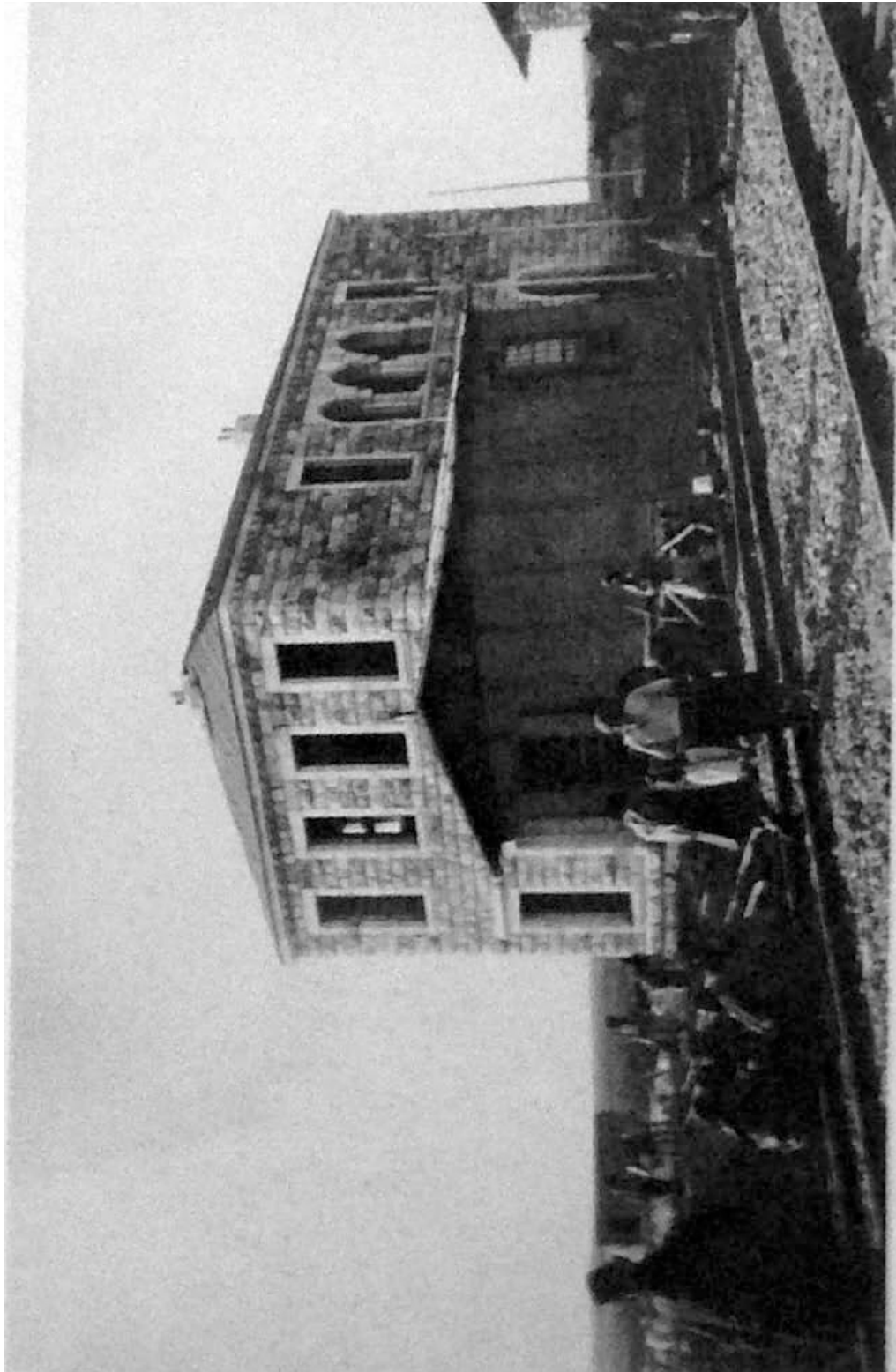


Fig. 5.184. Max von Oppenheim, view of railway building at Jerabulus, 1912. SOHa MvO29.15.6 A.O.30.



Fig. 5.185. Akçakale station, track side. Photograph: Mehmet Yavuz.

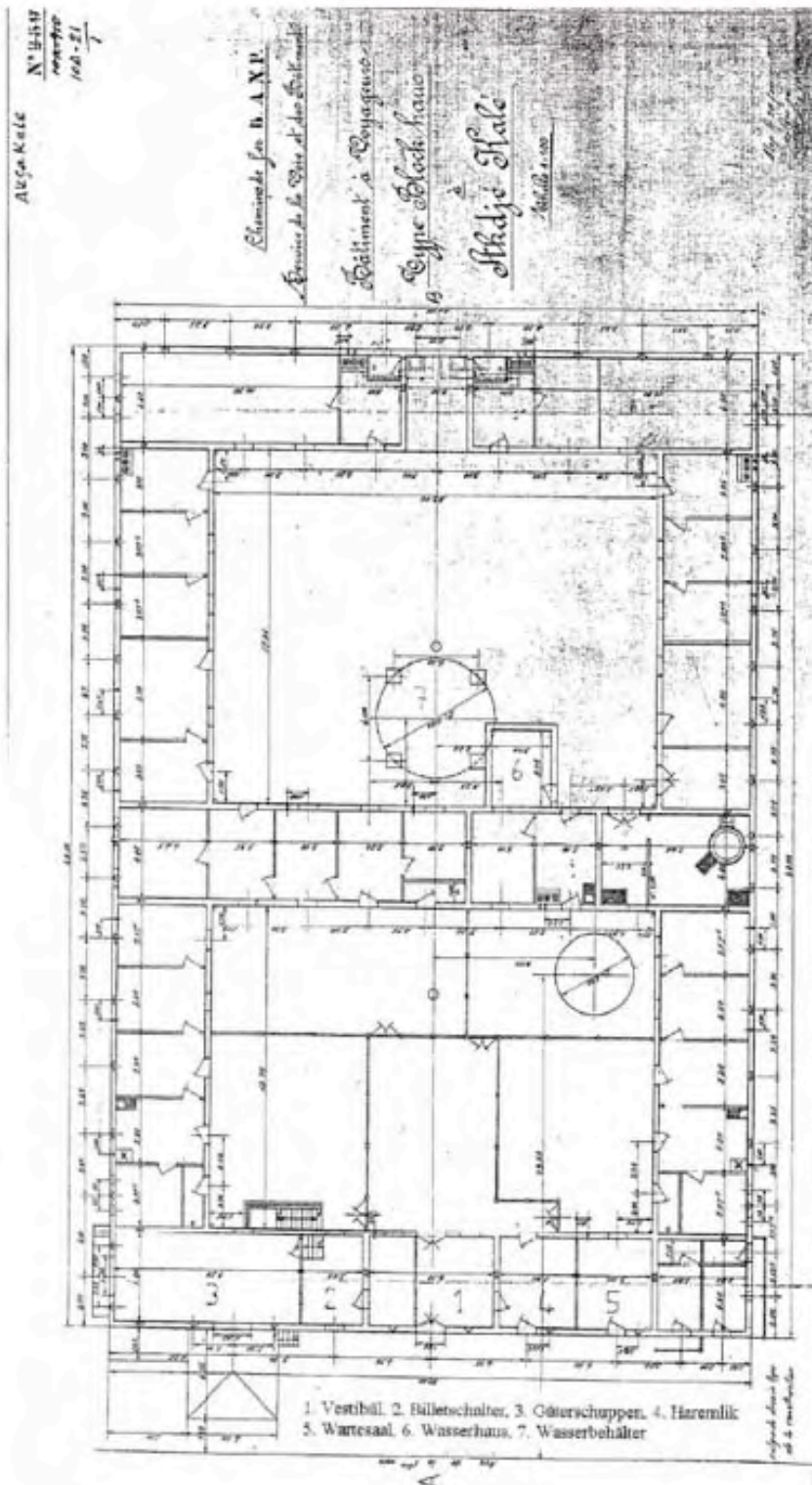


Fig. 5.186. Akçakale station, plan. TCDD 10A-21/1.



Fig. 5.187. Akçakale station, door detail. Photograph: Mehmet Yavuz.



Fig. 5.188. Postcard depicting Aleppo station, view from city side, c. 1920. Wikimedia Commons.



Fig. 5.189. Max von Oppenheim, Aleppo station, view from city side while under construction, c. 1913. SOHA 29/15.6 S.34b.

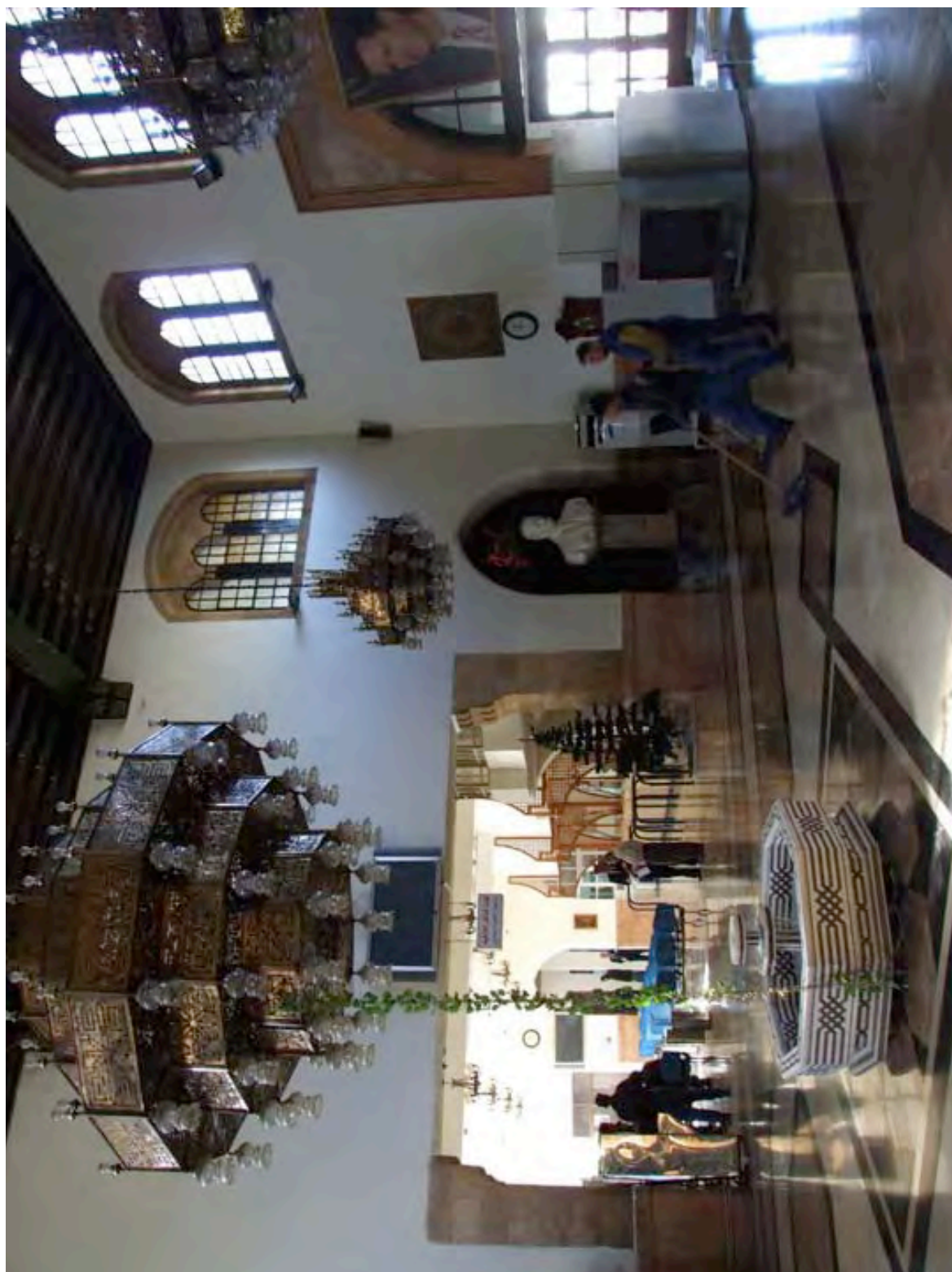


Fig. 5.190. Aleppo station, interior view of main hall. Photograph: Mehmet Yavuz.



Fig. 5.191. Unknown, Aleppo station, track side, c. 1920. Wikimedia Commons.

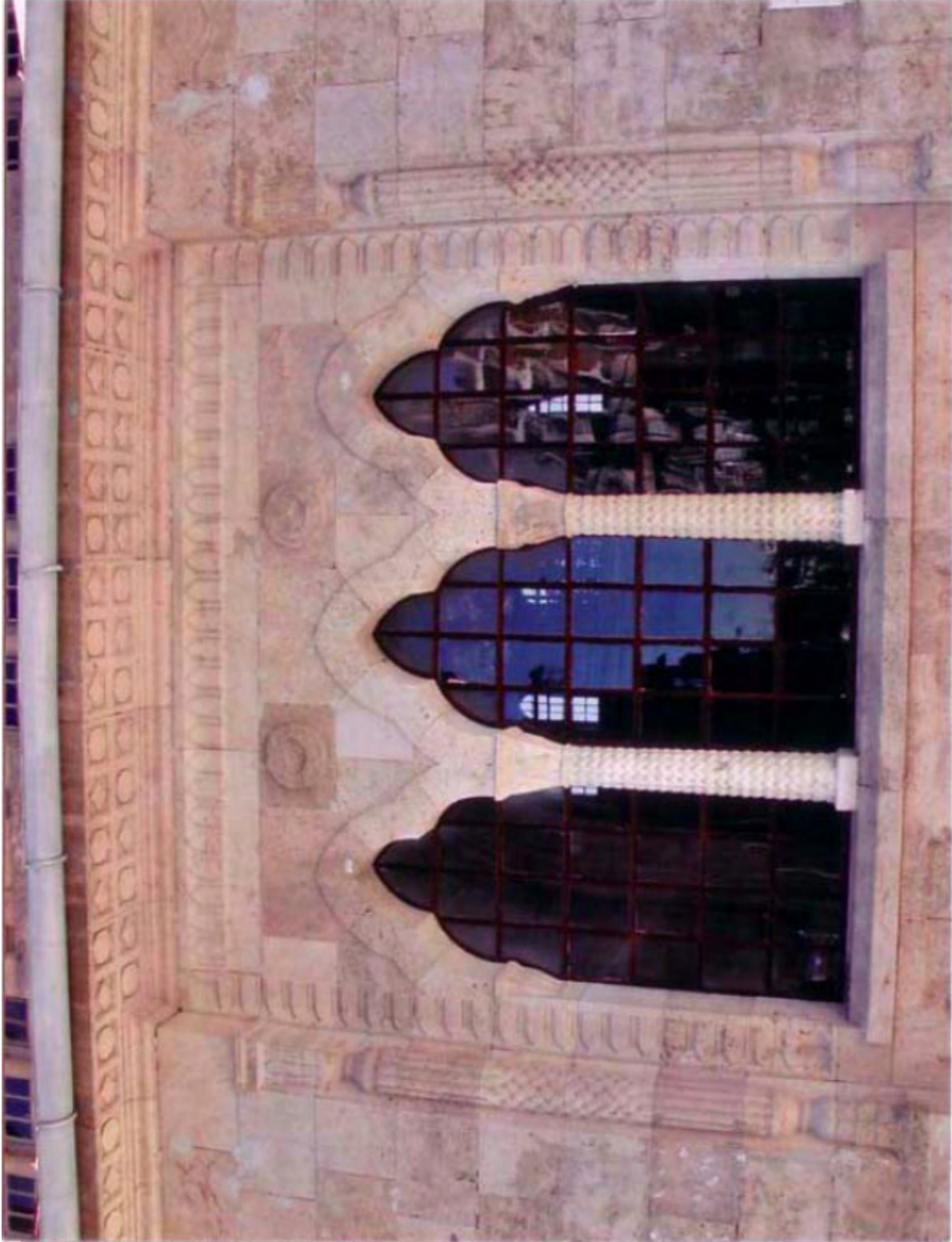


Fig. 5.192. Aleppo station, window detail. Photo: Mehmet Yavuz.

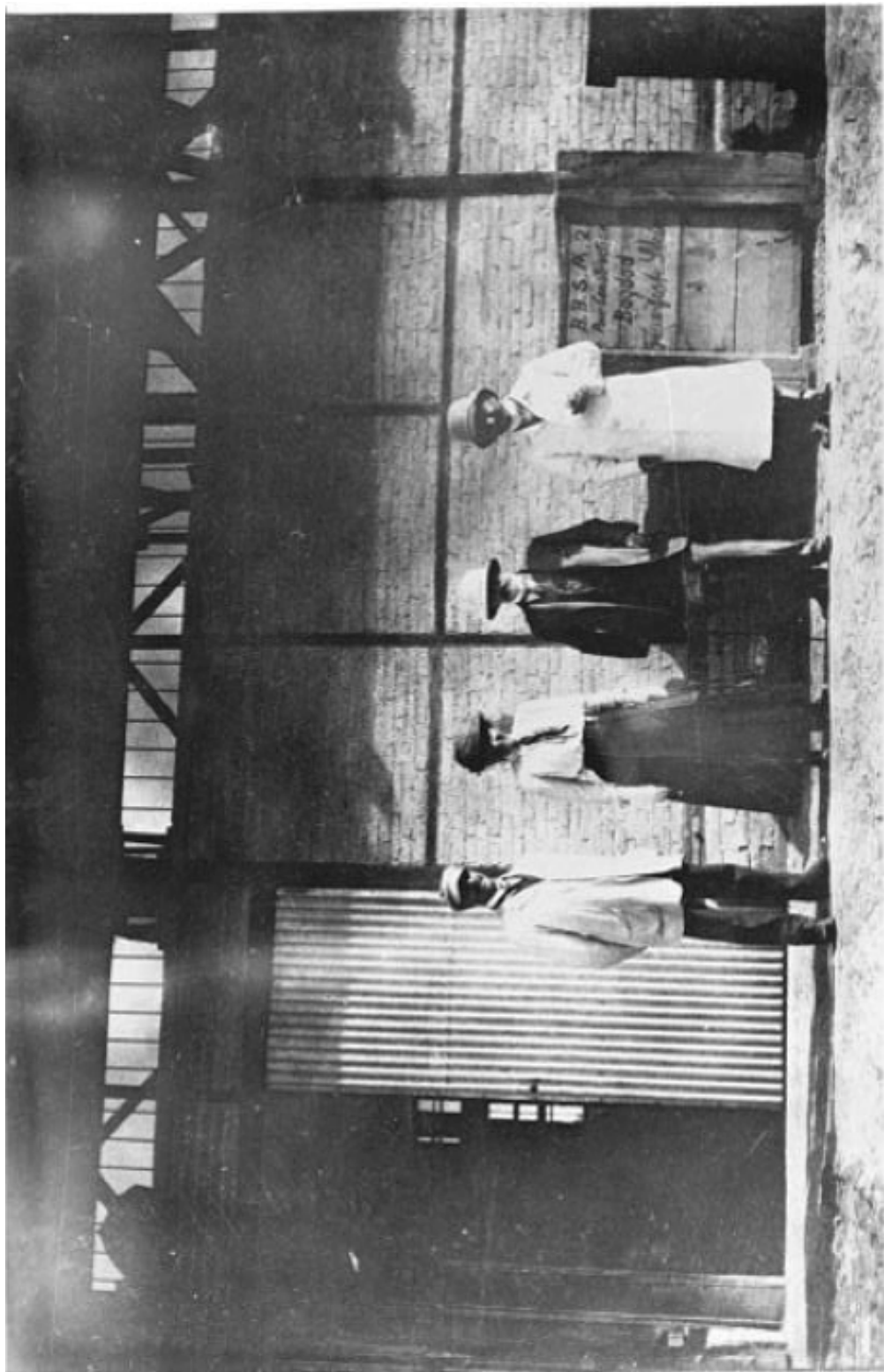


Fig. 5.193. Unknown, Gertrude Bell, Meissner Pasha and two unidentified European men in front of Baghdad railway station buildings, 1914. NUSC Y/379.

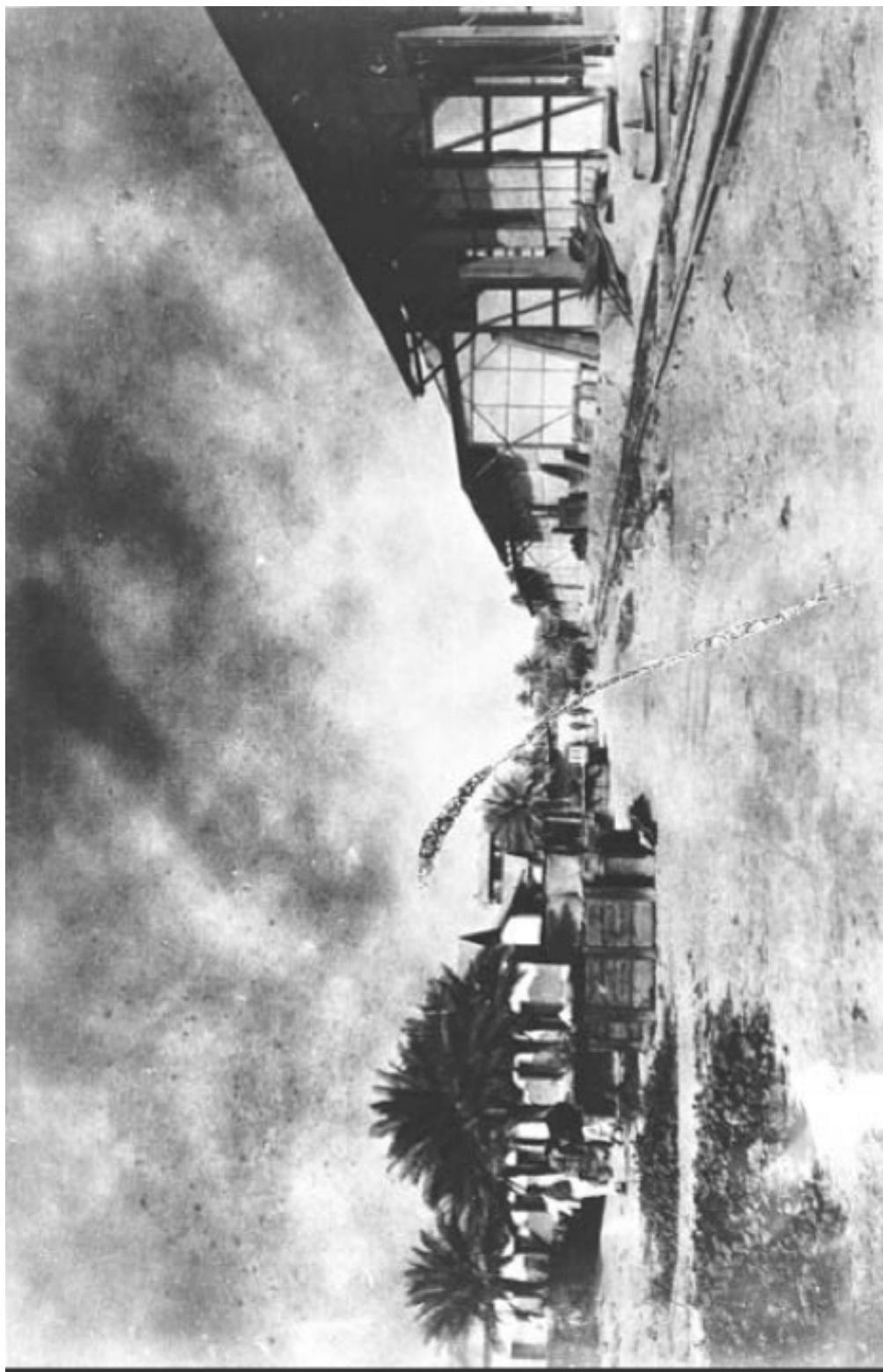


Fig. 5.194. Gertrude Bell, Baghdad railway station buildings, 1914. NUSC Y/378.



Fig. 5.195. Postcard depicting Baghdad station, c. 1916. Wikimedia Commons.

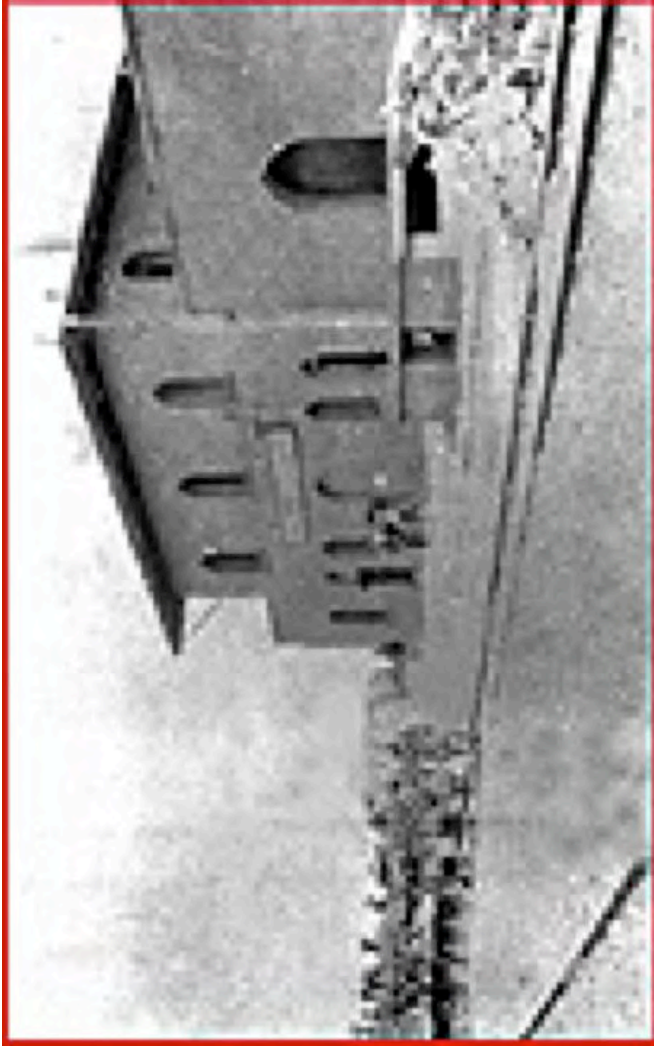


Fig. 5.196. Unknown, Samarra station, track side. Photograph: Wikimedia Commons.



Fig. 5.197. American Colony Jerusalem, Mosul station, under construction, c. 1917. LOC matpc 04662.



Fig. 5.198. Ibrahim Müteferrika, illustration of the vakvak ağacı (vak-vak tree) from *Tarik-i Hind-i garbi* (Constantinople, 1730), 159, woodcut. Brown University, John Carter Brown Archive of Early American Images, B730 T186.

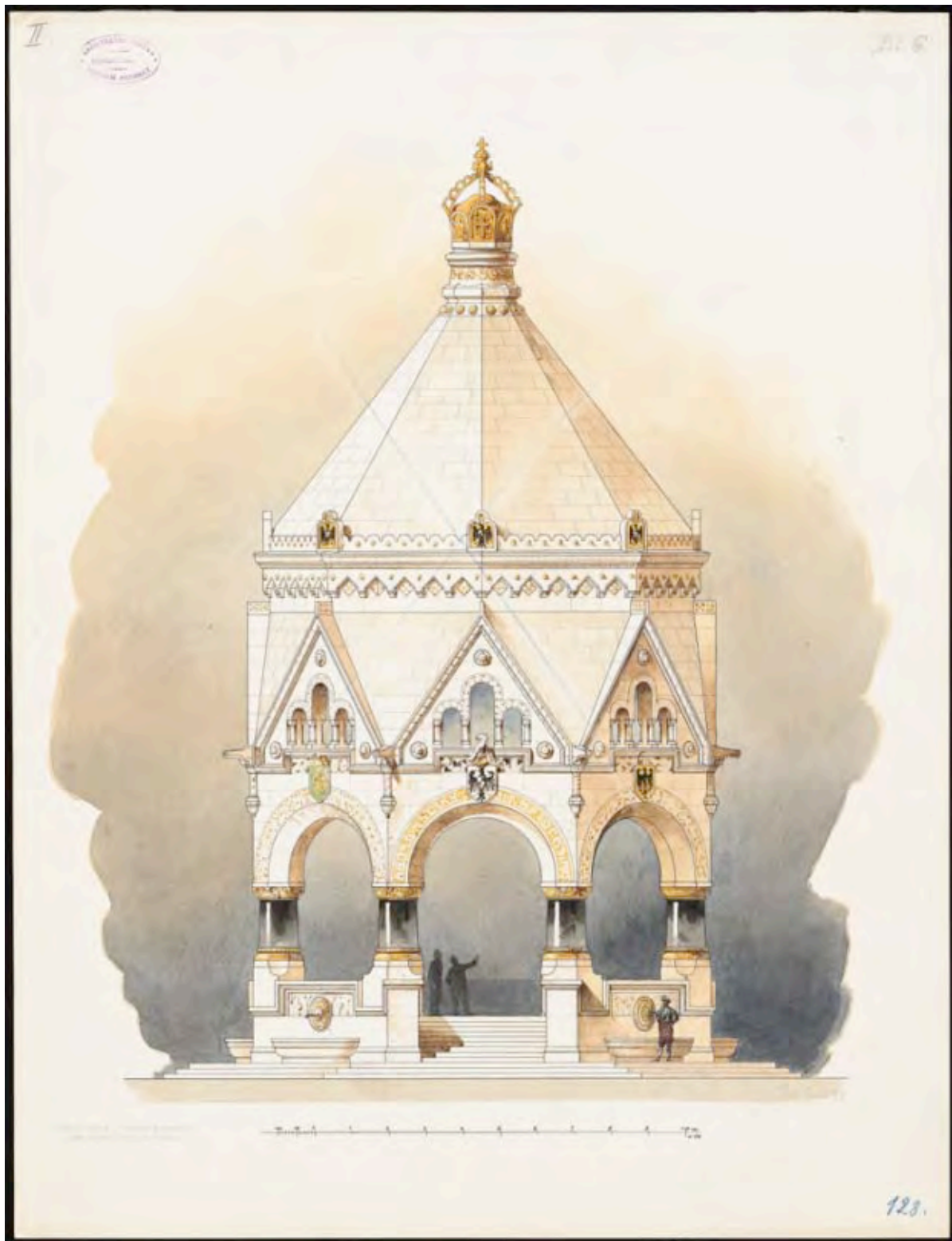


Fig. 5.199. Max Spitta, design for a fountain in Constantinople, elevation, iteration 1. TUB 16886.

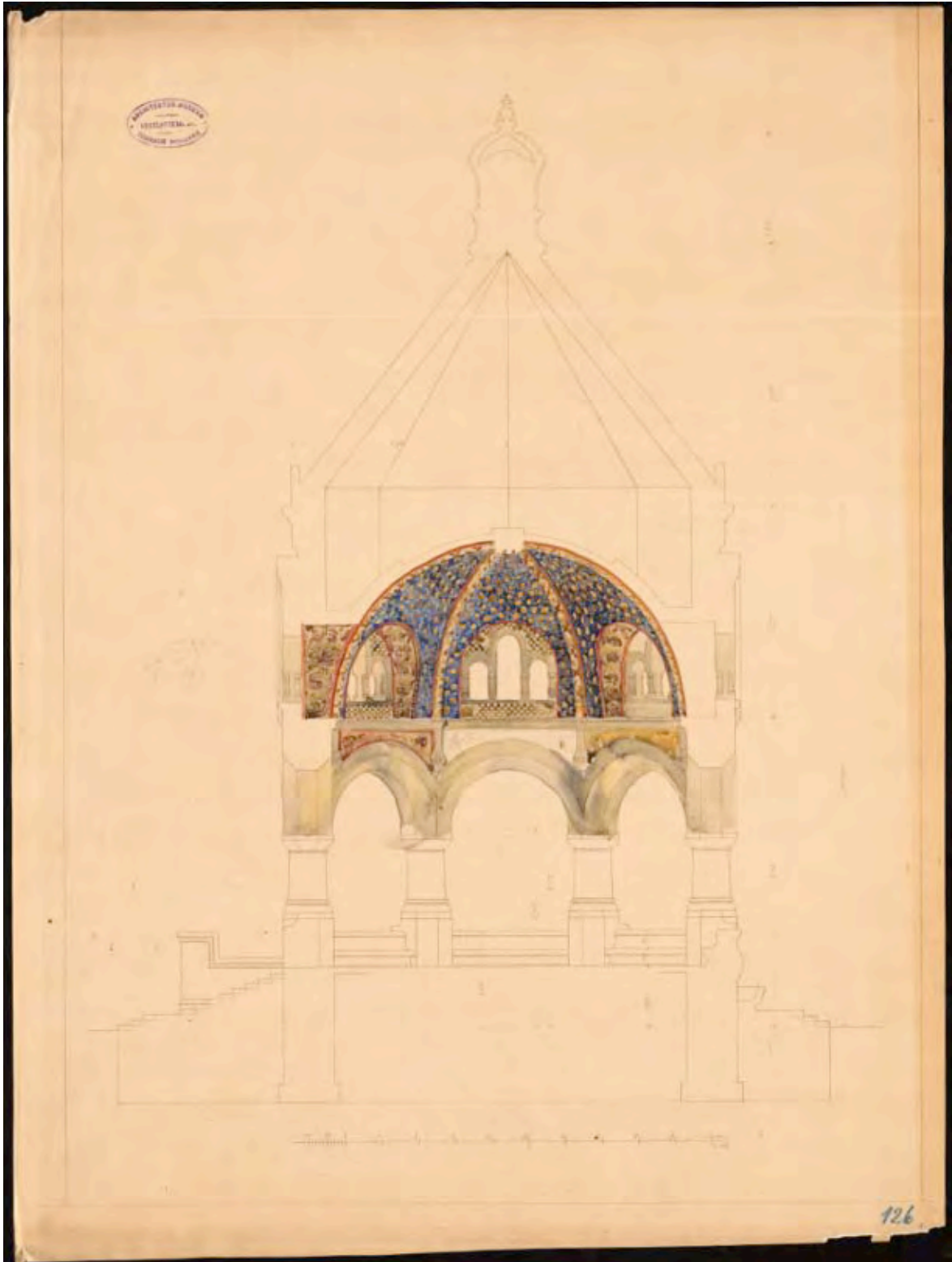


Fig. 5.200. Max Spitta, design for a fountain in Constantinople, section, iteration 1. TUB 16887.

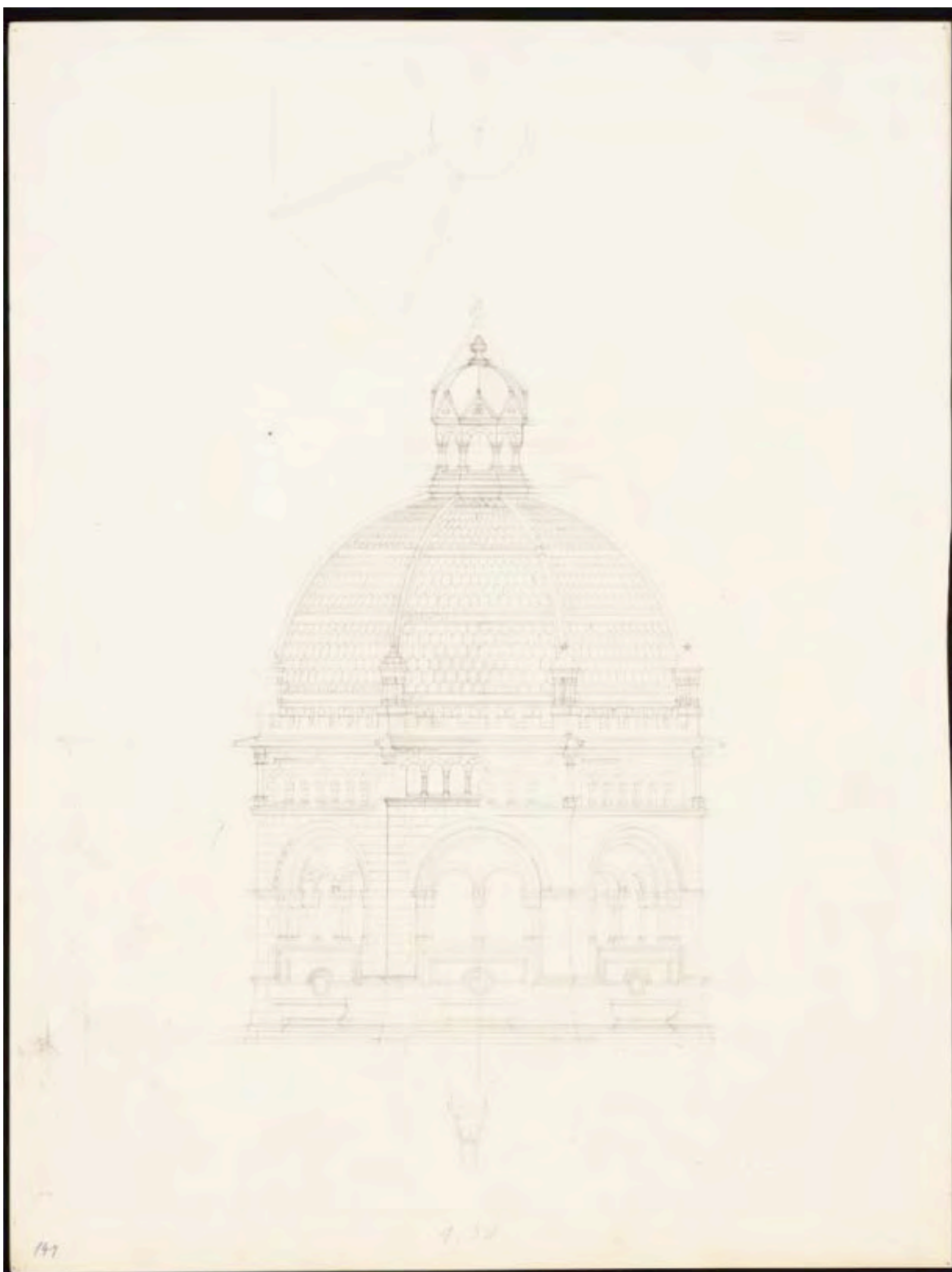


Fig. 5.201. Max Spitta, design for a fountain in Constantinople, elevation, iteration 2. TUB 16888.

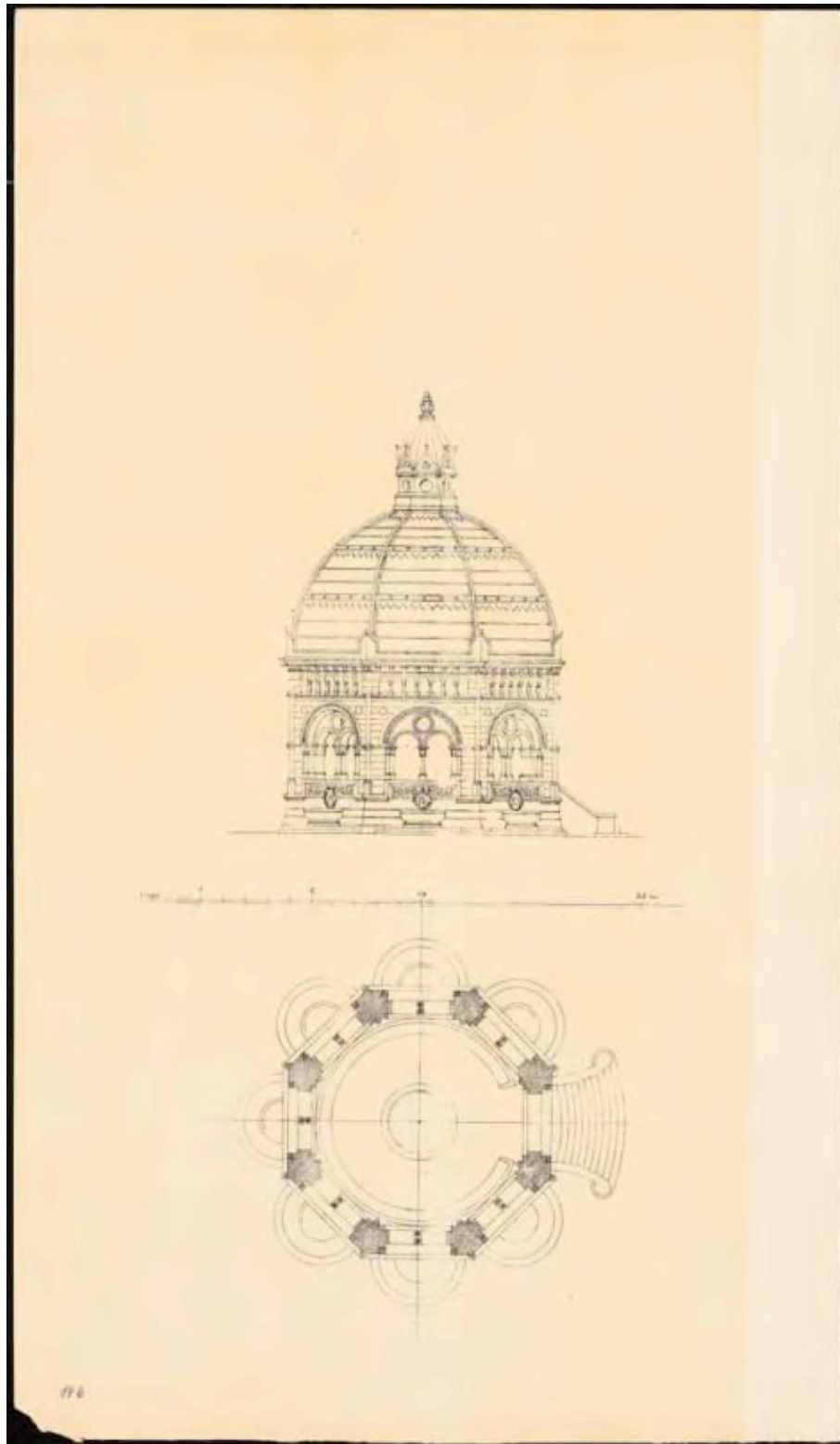


Fig. 5.202. Max Spitta, design for a fountain in Constantinople, plan elevation, iteration 3. TUB 16889.

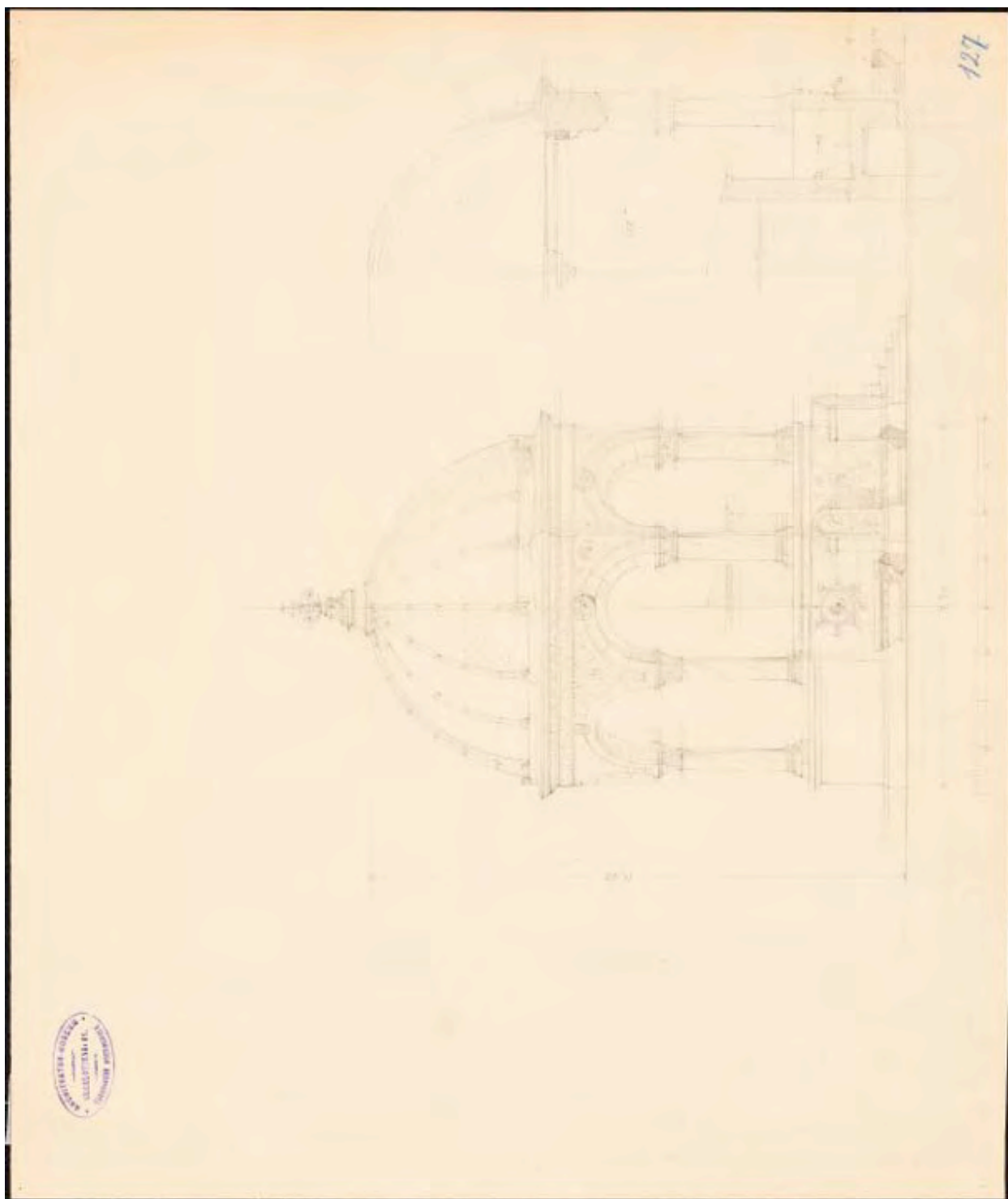


Fig. 5.203. Max Spitta, design for a fountain in Constantinople, elevation, iteration 4. TUB 16890.

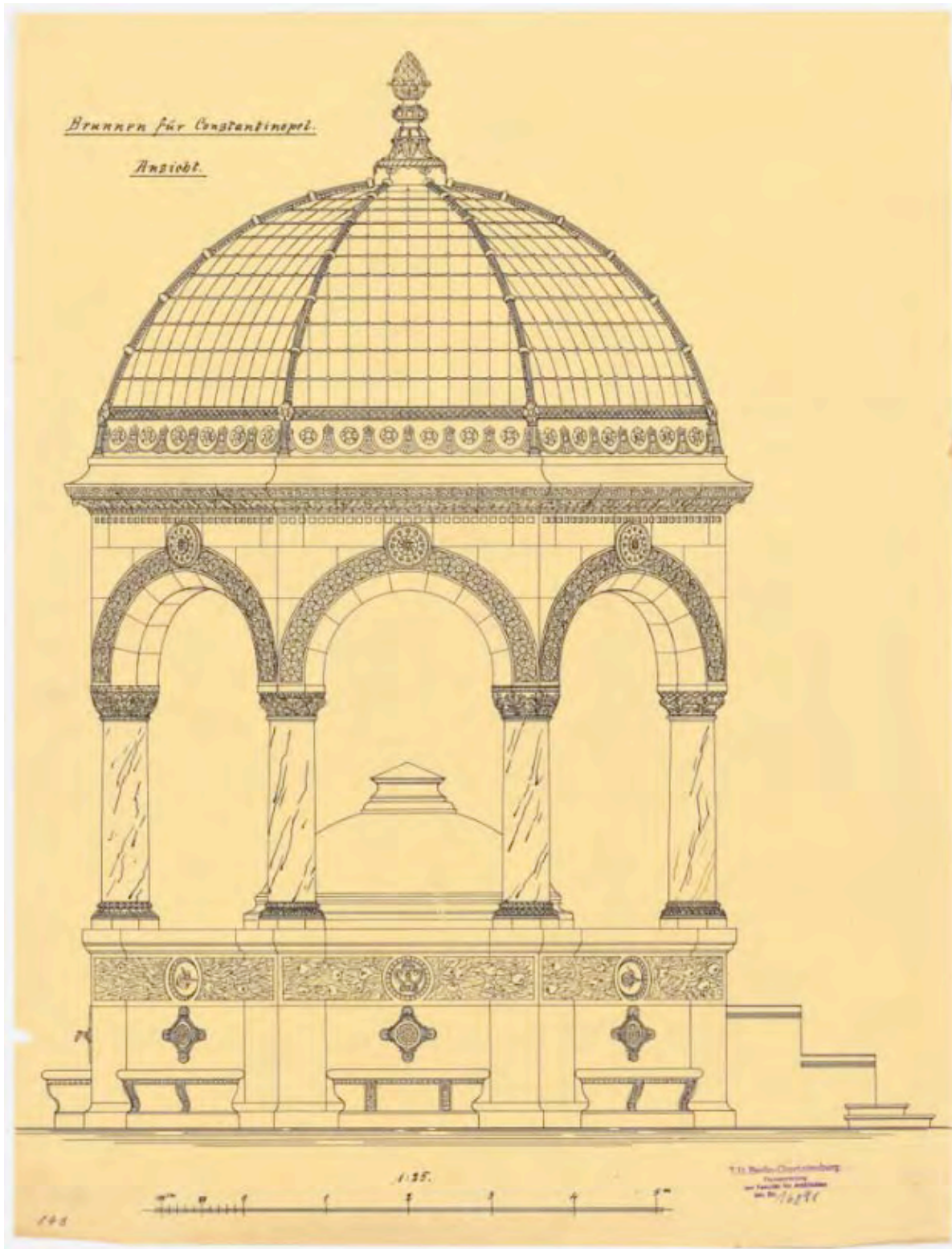


Fig. 5.204. Max Spitta, design for a fountain in Constantinople, elevation, iteration 4. TUB 16891.



Fig. 5.205. Max Spitta, photograph of a model of a design for a fountain in Constantinople, 1899. TUB 10701.

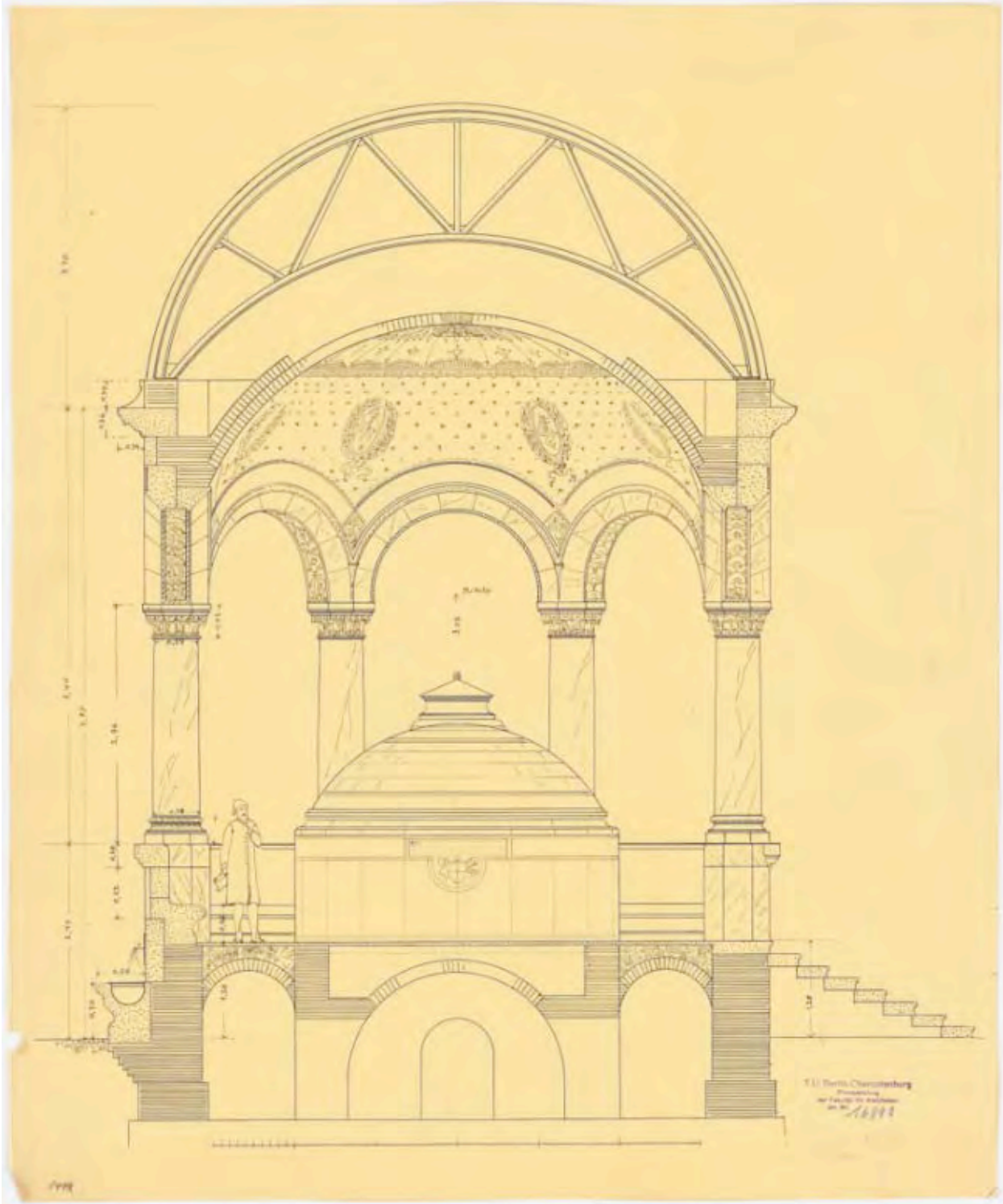


Fig. 5.206. Max Spitta, design for a fountain in Constantinople, section, final iteration. TUB 16892.

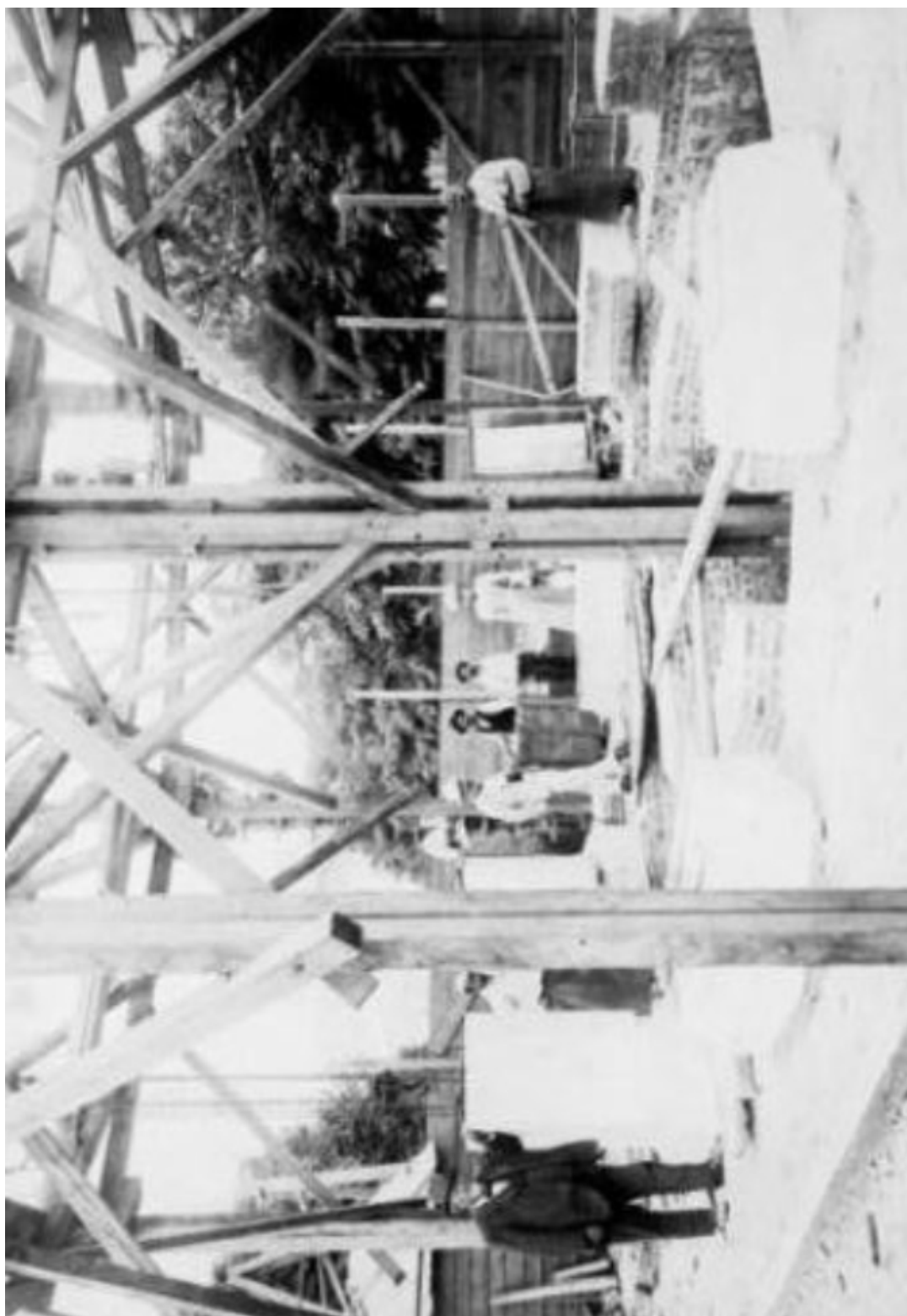


Fig. 5.208. Unknown, view of the Construction of Max Spitta's German Fountain, January 1901. Wikimedia Commons.

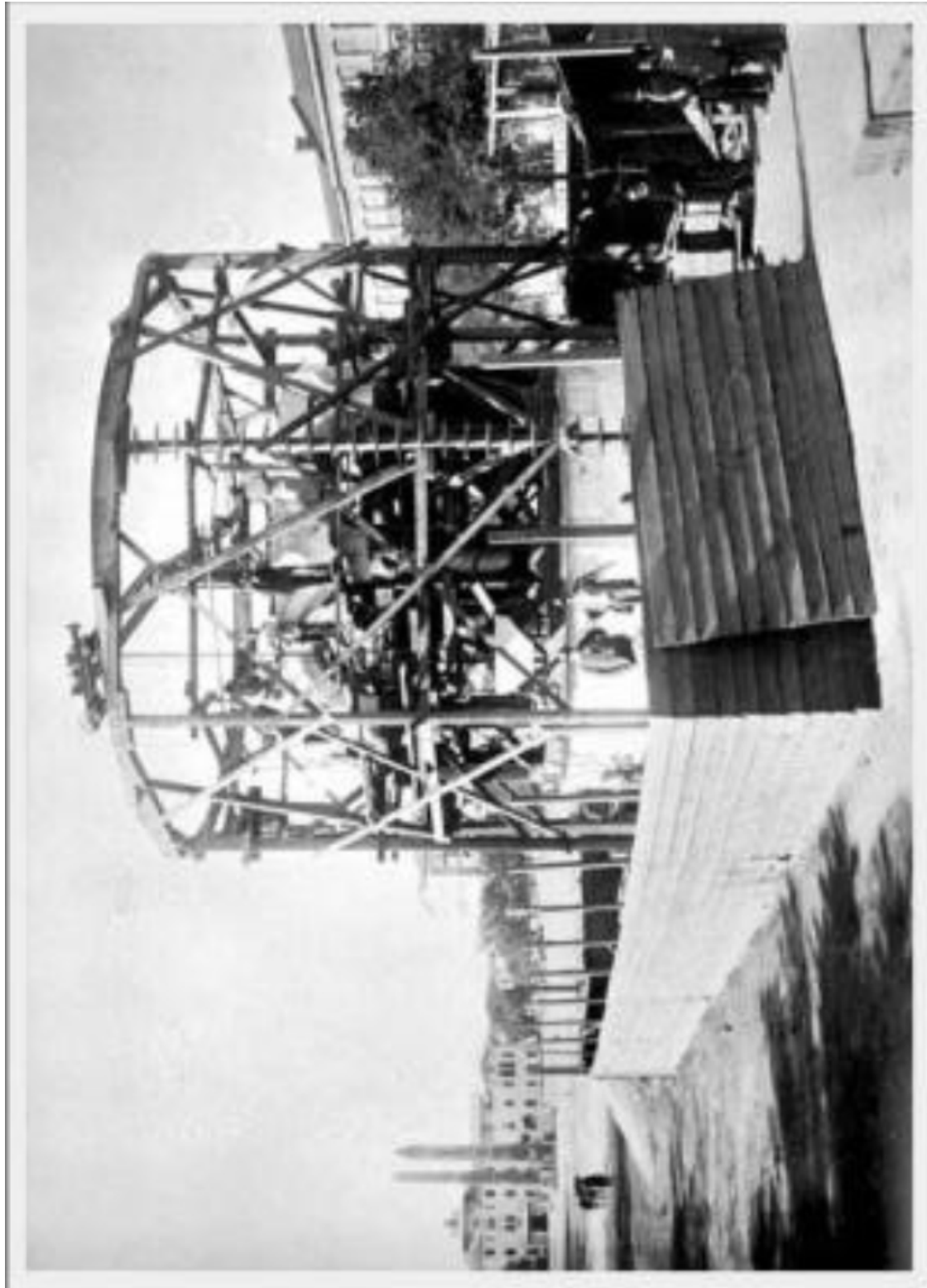


Fig. 5.209. Unknown, view of the Construction of Max Spitta's German Fountain, January 1901. Wikimedia Commons.



Fig. 5.210. Unknown, view of the inauguration of the German Fountain at the Hippodrome, January 27, 1901. Wikimedia Commons.



Fig. 5.211. German Fountain, detail of plaque. Photograph of the author.



Fig. 5.212. German Fountain, view of decorative emblem on underside of dome. Photograph of the author.



Fig. 5.213. German Fountain, view of mosaic gilding and epigraphic ornament under dome. Photograph of the author.

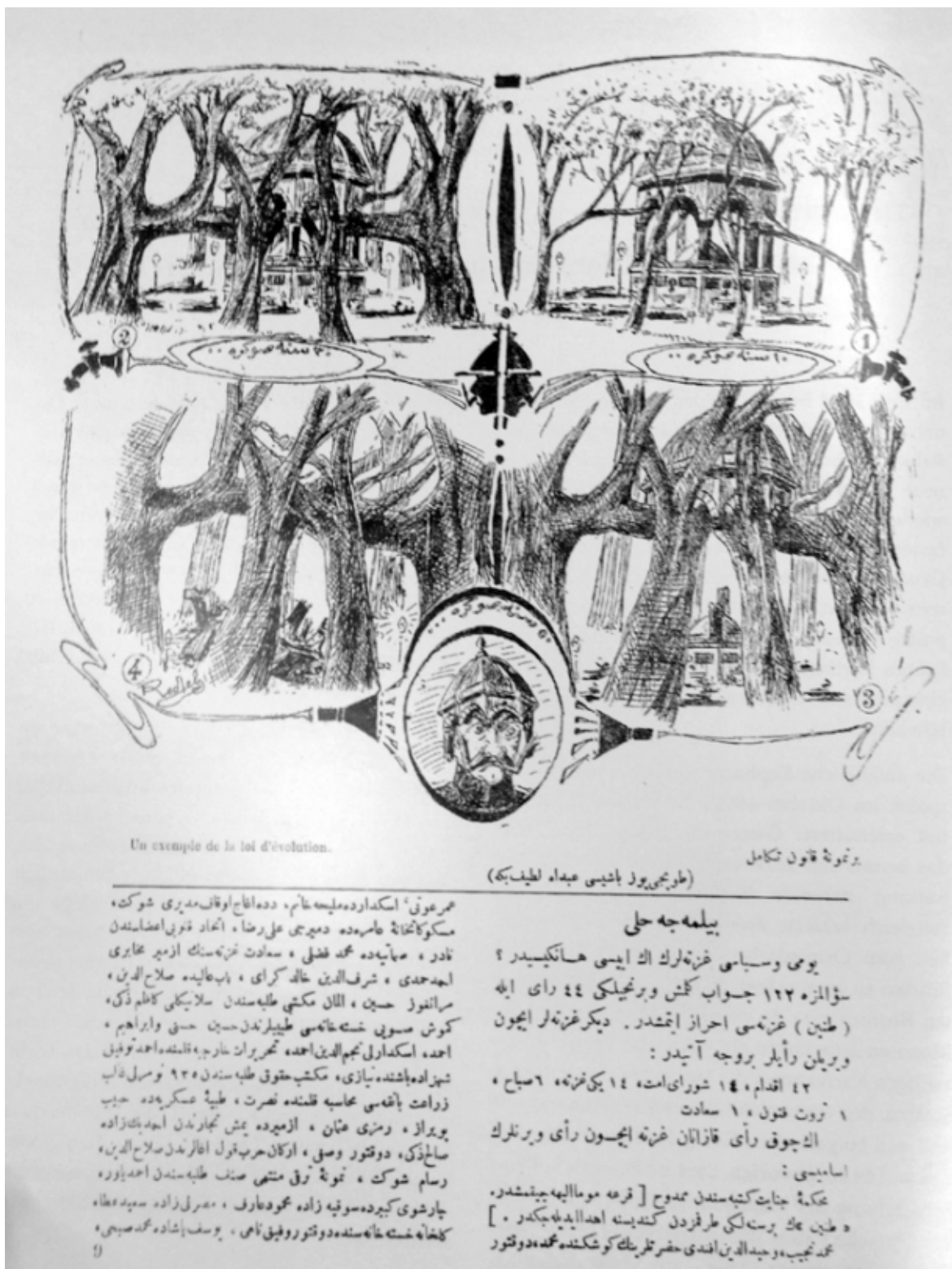


Fig. 5.214. Unknown artist, comic depiction of the natural destruction of the German Fountain at the Hippodrome captioned “An example of evolution,” printed in *Kalem*, December 3, 1908.



Fig. 5.215. Hejaz Railway commemorative column, Haifa. Photograph of the author.

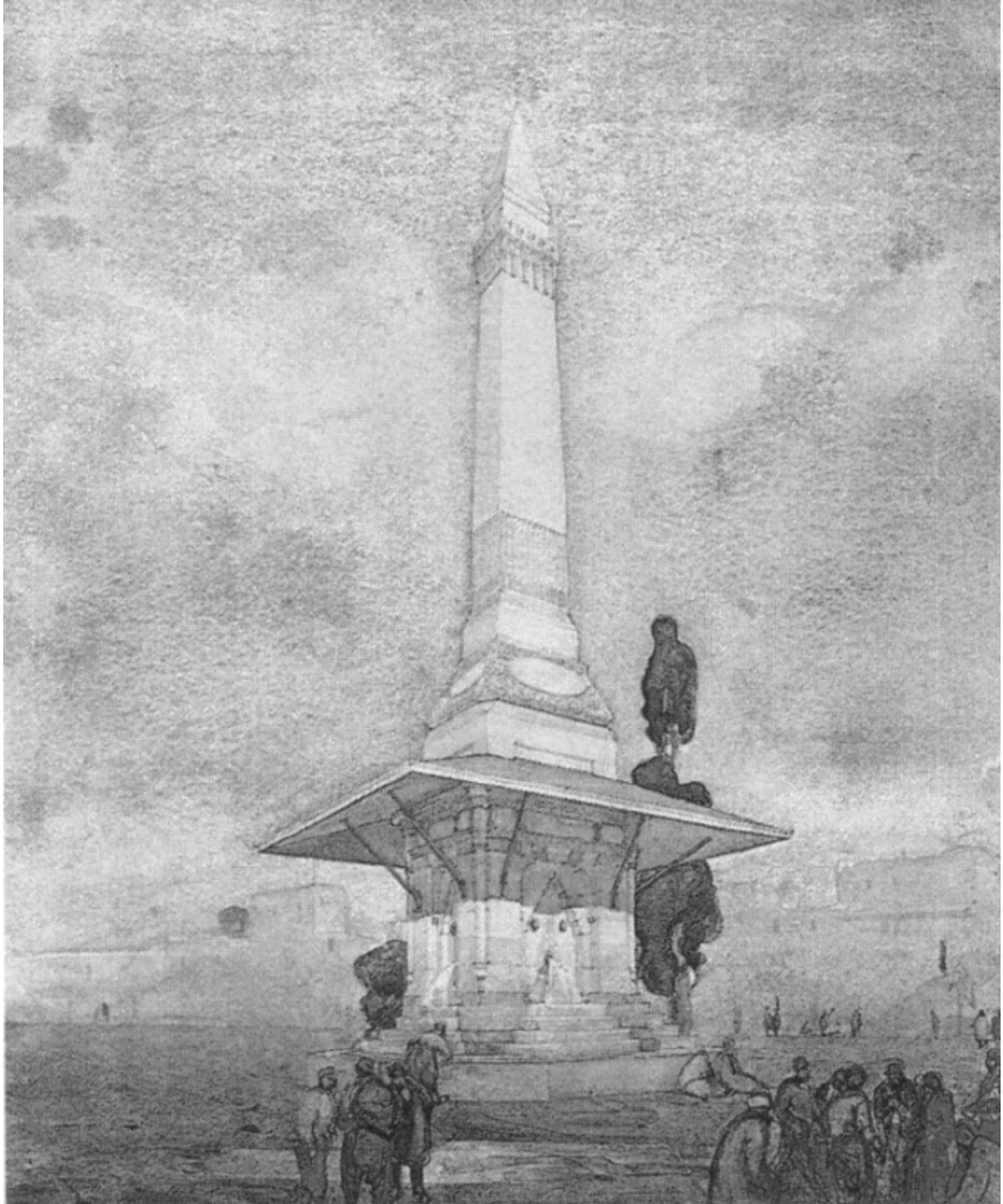


Fig. 5.216. Raimondo D'Aronco, telegraph monument in Damascus, unrealized project in the form of an obelisk (Drawing from Manfredi Cicoletti, "D'Aronco e la Turchia," in *D'Aronco Architetto* (Milan: Electa, 1982), fig. 55).



Fig. 5.217. Postcard depicting Raimondo D'Aronco's telegraph monument in Damascus, c. 1910. SALT Research, AHDAM004.

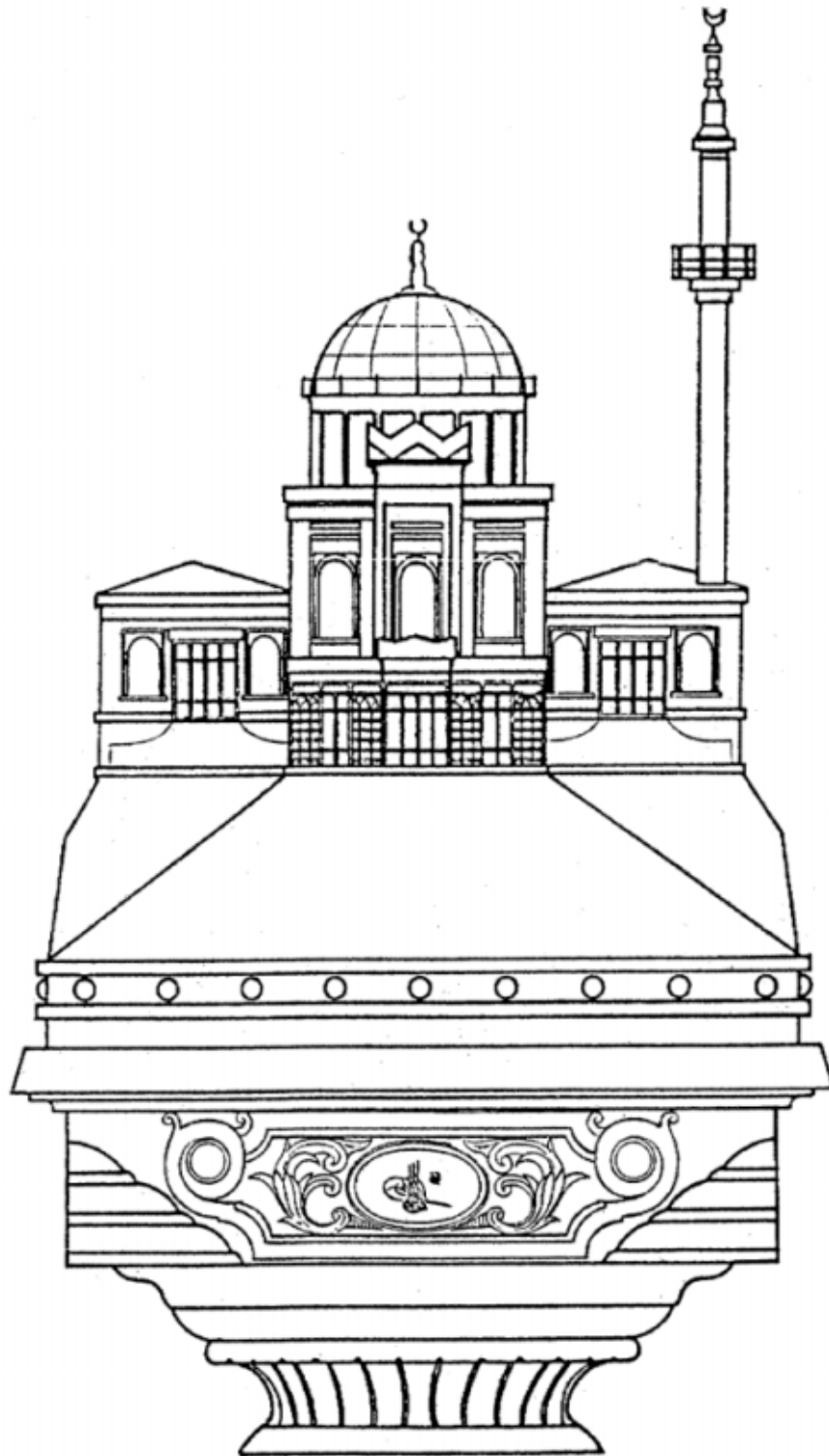


Fig. 5.218. Raimondo d'Aronco, telegraph monument in Damascus, detail of the replica of Yıldız mosque on the column head. Drawing from from 'Ismat Mastrük, "al-naşb al-tadhkārī l-il'-ittişālāt al-barkīyya bain Dimashq wa'l-Madina al-munawwara, Sāha al-shuhādā, Dimasqh," diss. Eng., University of Damscus, 1992-93.



Fig. 5.219. Pascal Sebah & Policarpe Joaillier, view of the Yıldız mosque, c. 1910. LOC lot 9524, no. 4..



Fig. 5.220. Kütahya clock tower. Photograph of the author.

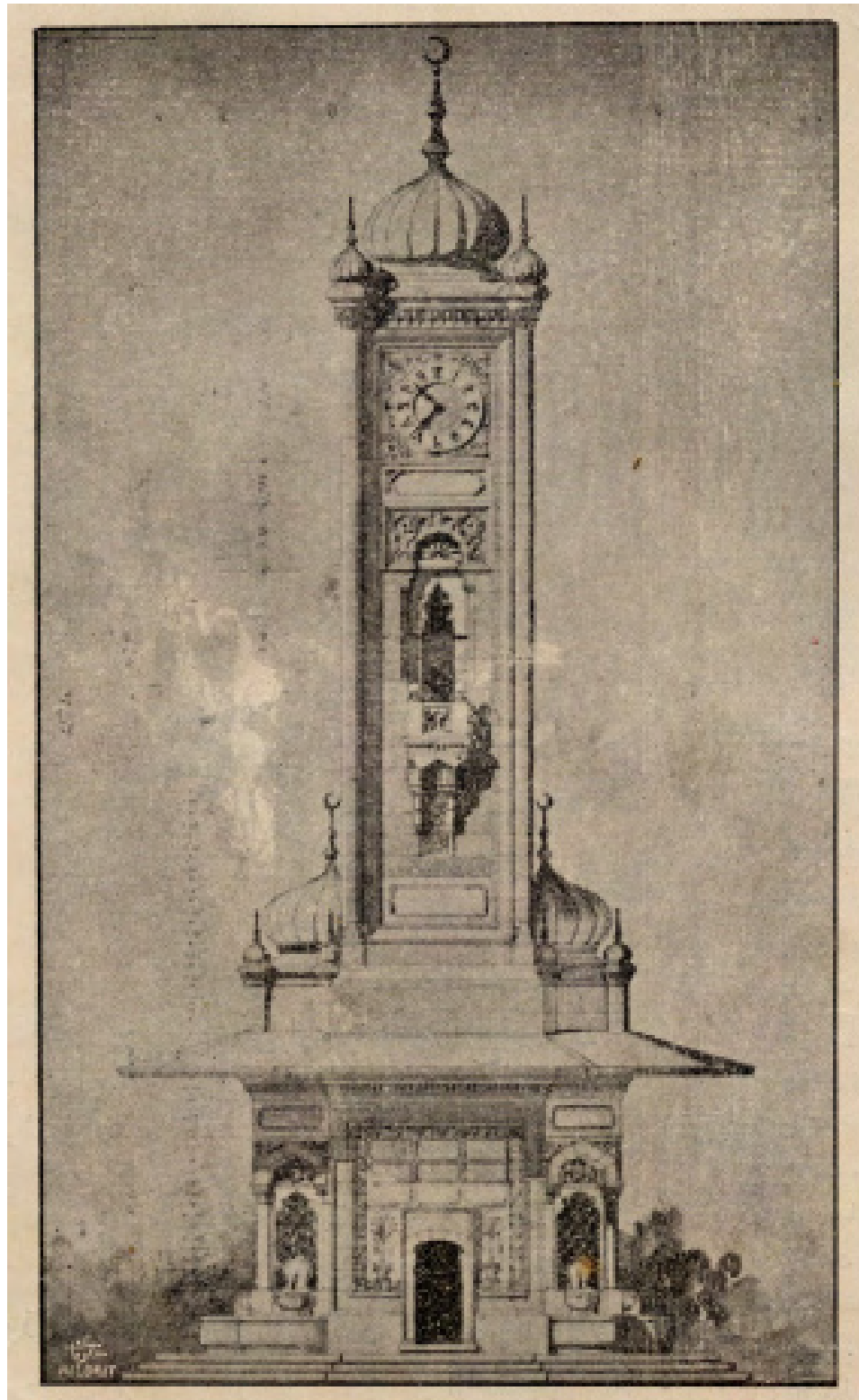


Fig. 5.221. Unknown, design for a clock tower to celebrate the beginning of the construction of the Hejaz Railway from Malumat 13 (1902). SALT Research, AHDAM008.



Fig. 5.222. Unknown, Muzaffer Bey, agricultural monument, Konya (original 1916, Atatürk statue, designed by Heinrich Krippel, added October 1926), Konya, c. 1930. Wikimedia Commons.

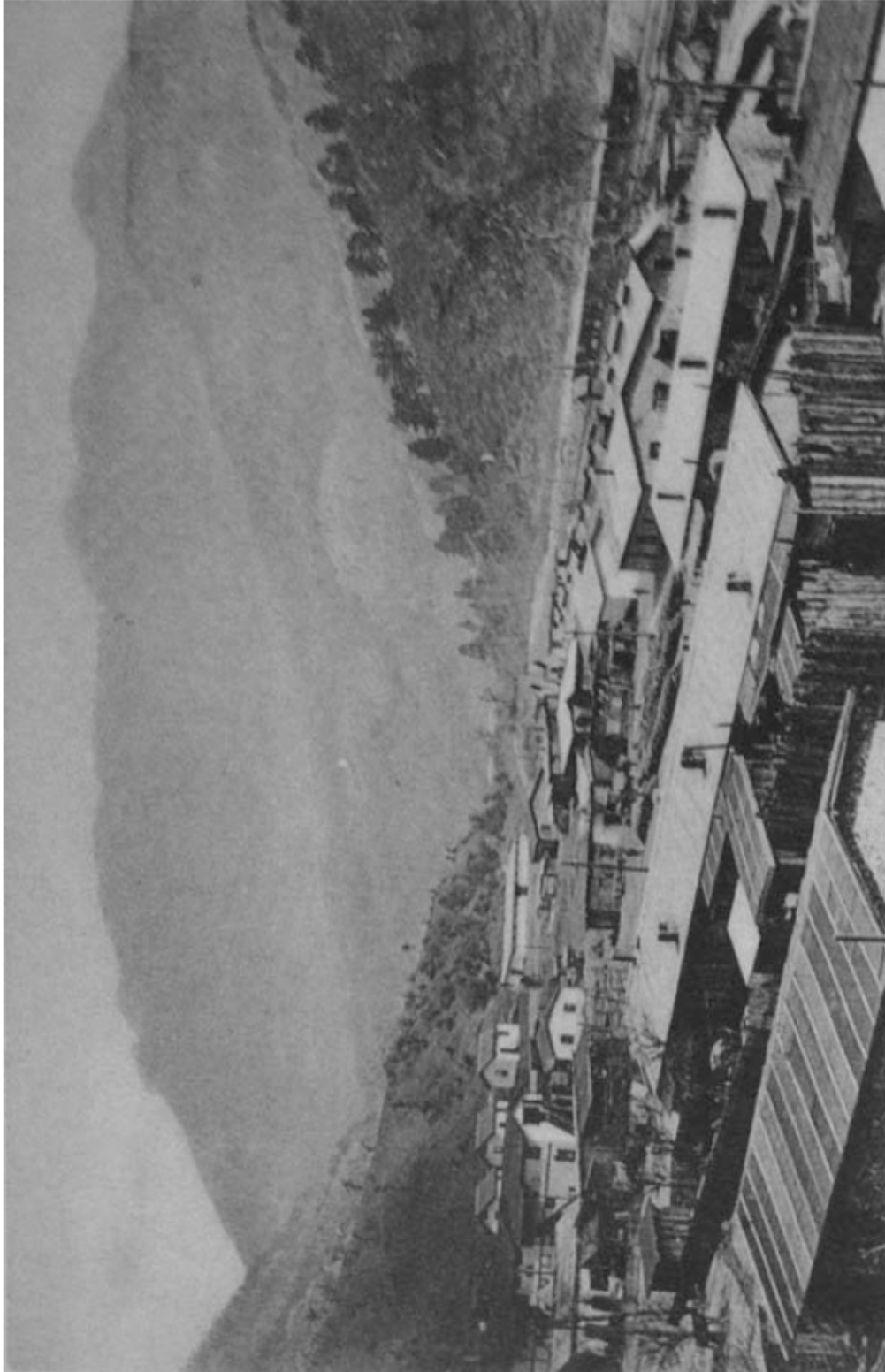


Fig. 5.223. Unknown, view of the worker settlement at Belemédik, c. 1912. Sammlung Irmengard Brand.



Fig. 5.224. Ruined barracks at Belemelik. Photograph of the author.



Fig. 5.225. View of steel rail used as support for a ruined building with the inscription “A.H.V. 1910” referencing the manufacturer – Altos Hornos de Vizcaya, a Spanish steel manufacturer – and the year in which it was produced.



Fig. 5.226. Taurus Mountains railway workers memorial. Photograph of the author.



Fig. 5.227. Unknown, bus drivers memorial, Çamalan, c. 1918. Courtesy Gunter Hartnagel.

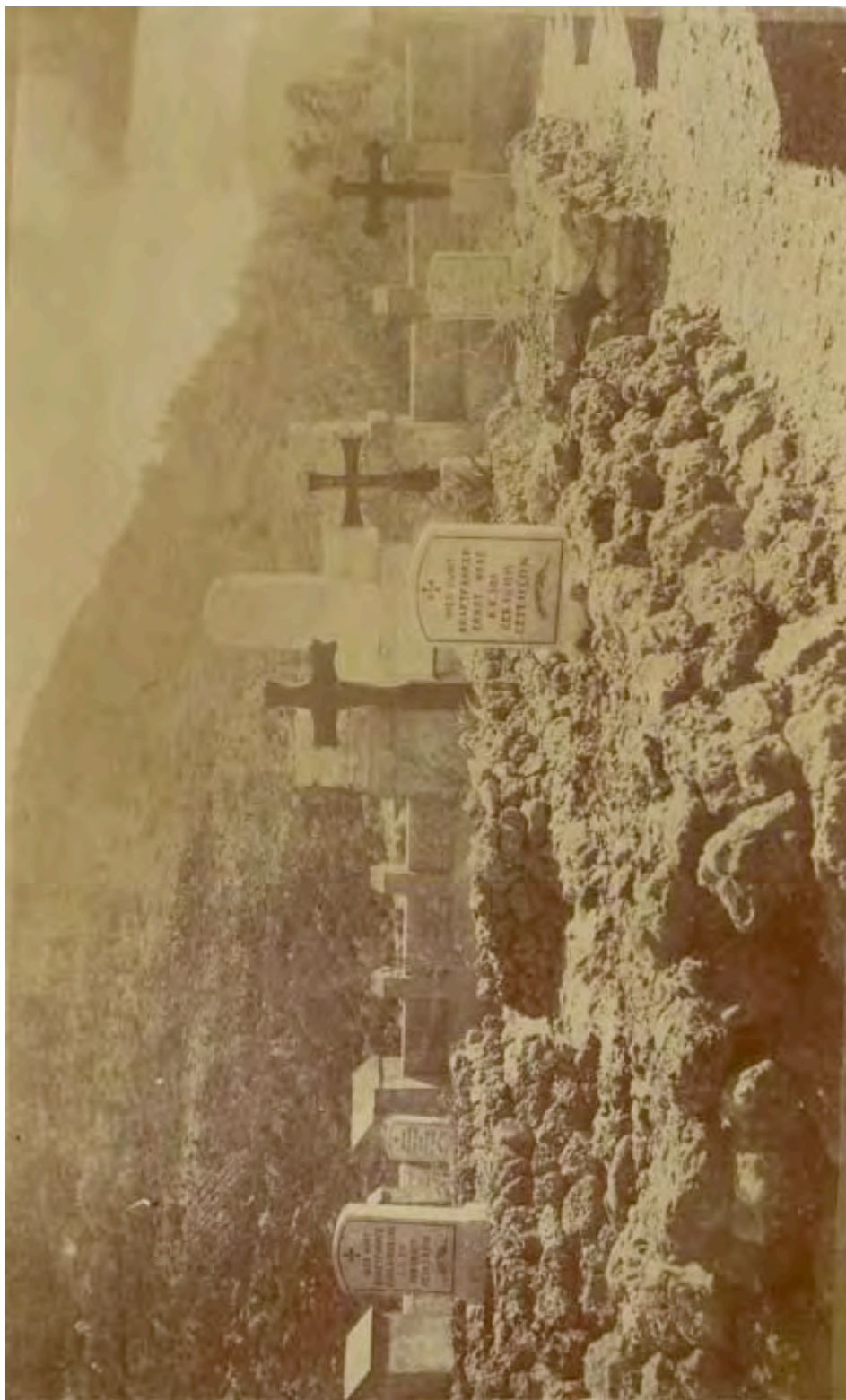


Fig. 5.228. Unknown, German cemetery, Çamalan, c. 1918. Courtesy Gunter Hartnagel.



Fig. 5.229. Unknown, German cemetery, Beledik. Courtesy Gunter Hartnagel.

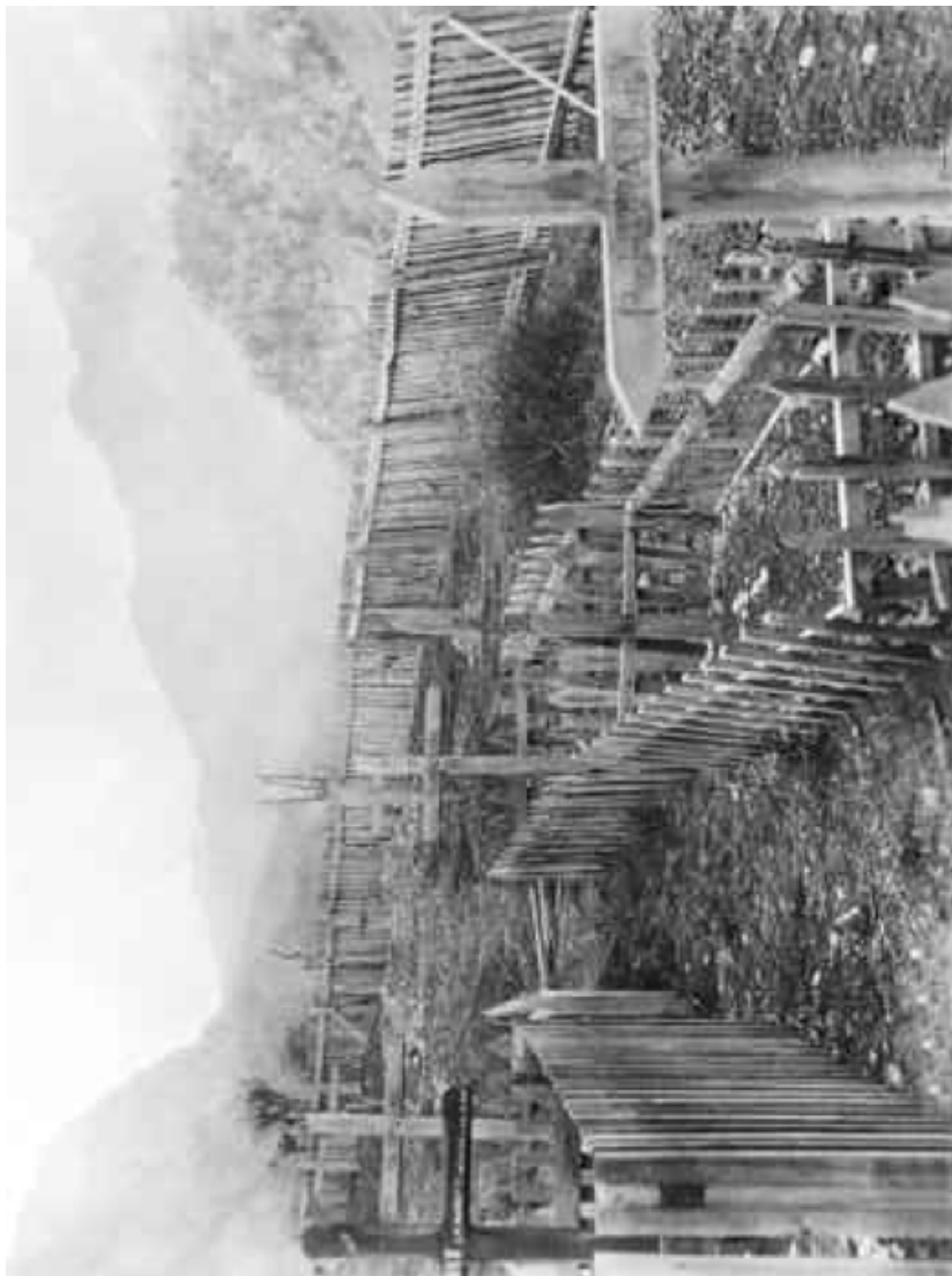


Fig. 5.230. Unknown, graves of Australian prisoners of war in the Christian cemetery at Beledik, Turkey. AWM P01645.002.



Fig. 5.231. Yıldız Palace, interior view of the Sedefli Salon (mother of pearl room), completed 1889. Photograph: Turgay Bülbul.



Fig. 5.232. Hereke, view from northwest, Kaiser Wilhelm II Kiosk. Photograph of the author.



Fig. 5.233. Interior view of the Hereke Kiosk, reception room (constructed 1898). TBBM Milli Saraylar.

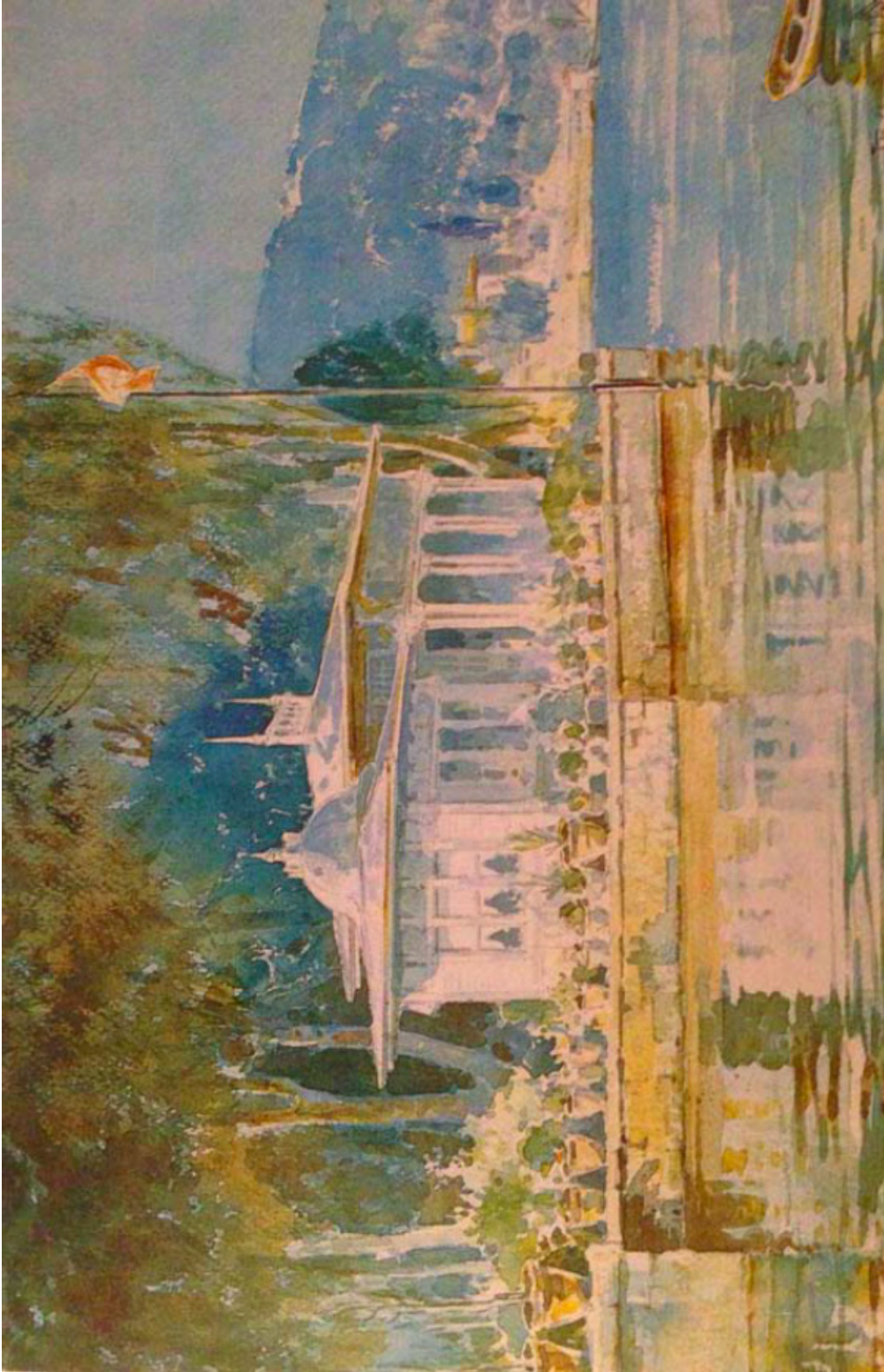


Fig. 5.234. T. Baldasar, watercolor of the the Kaiser Wilhelm pavilion at Hereke, c. 1900. Türkiye Büyük Millet Meclisi paintings collection, env. no. 52/1949.

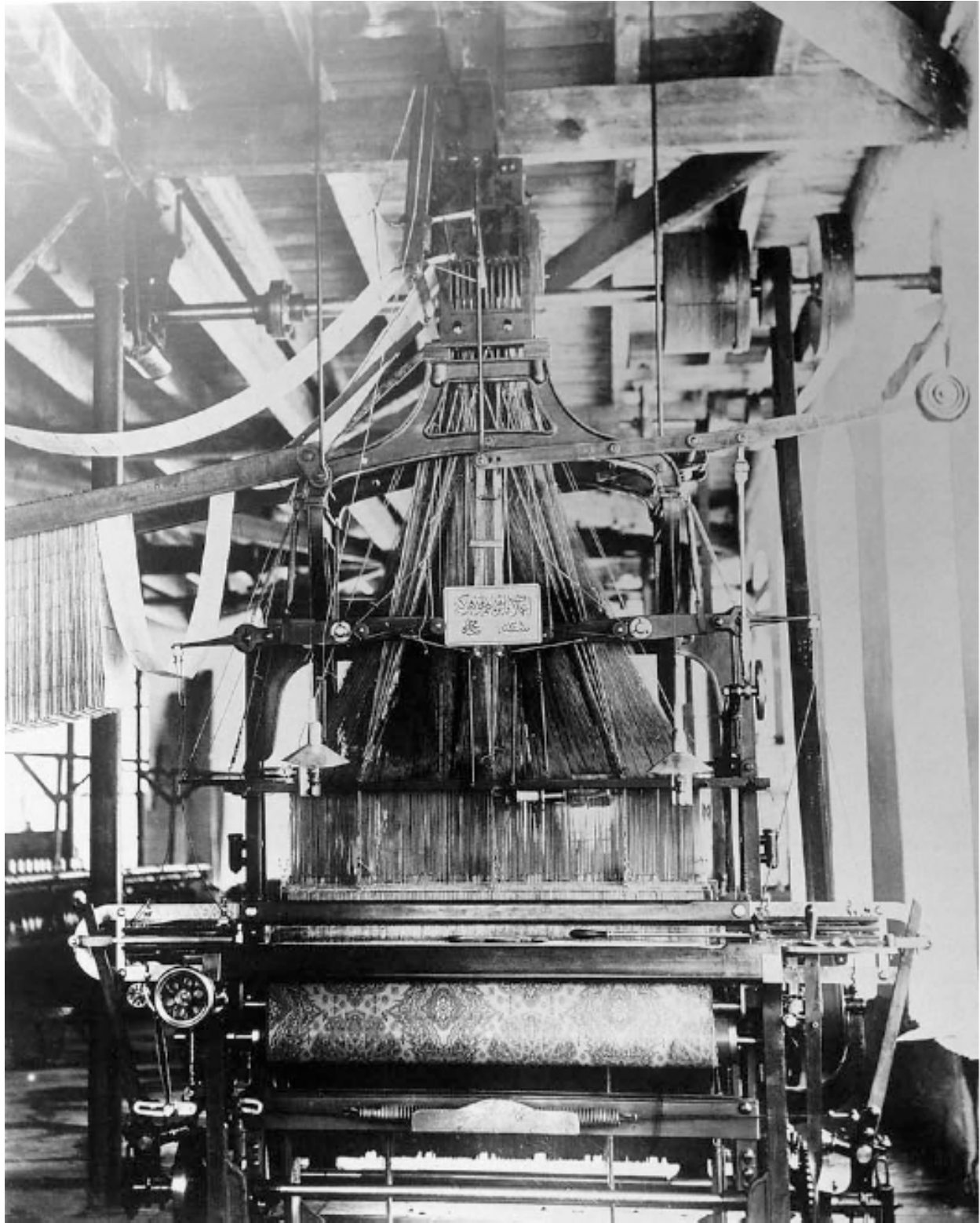


Fig. 5.235. Unknown, imperial jacquard loom at Hereke, c. 1900. IRCICA photo archive 90453-10.

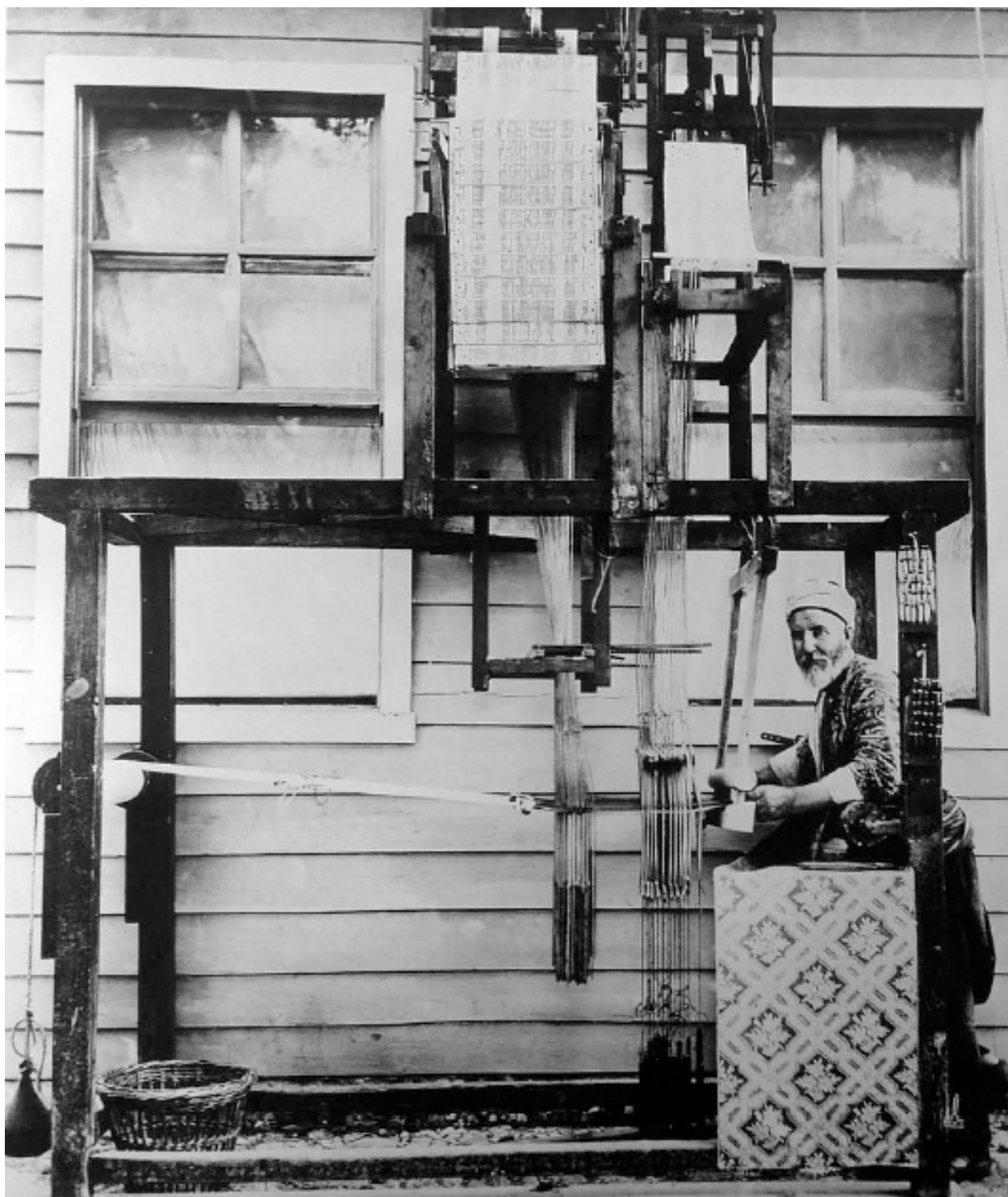


Fig. 5.236. Unknown, Hereke weaver seated at an outdoor loom, c. 1900. IRCICA photo archive 90453-32.



Fig. 5.237. Unknown, view of Auguste-Viktoria-Stiftung, Jerusalem, c. 1910. Wikimedia Commons.

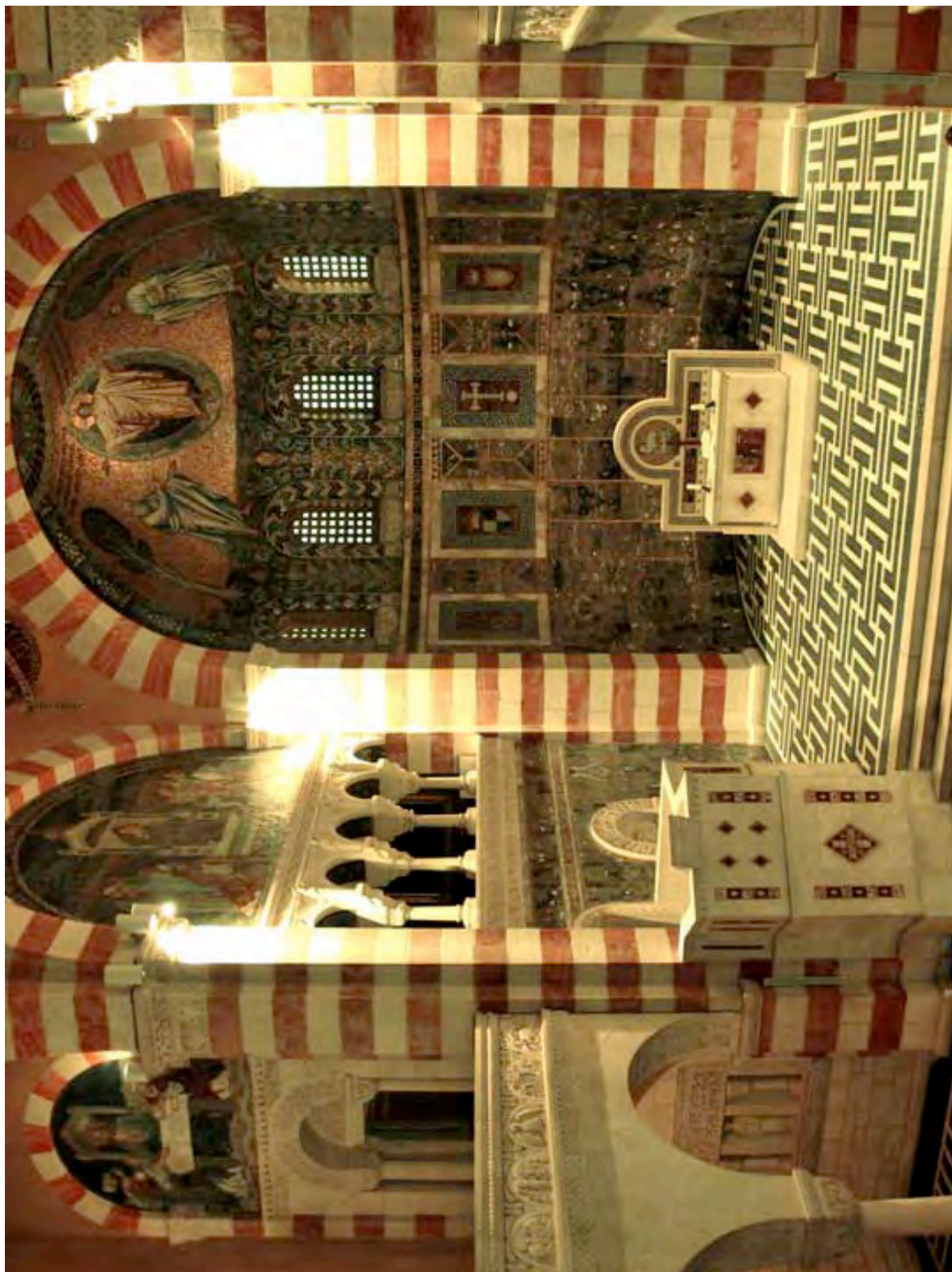


Fig. 5.238. Auguste-Viktoria-Stiftung, Jerusalem, interior view of the Church of the Ascension. Wikimedia Commons.



Fig. 5.239. Cross of the Mount of Olives. Photograph: Robert Prummel.



Fig. 5.240. Auguste-Viktoria-Stiftung, main entry portal. Photograph: Ana al' Ain.

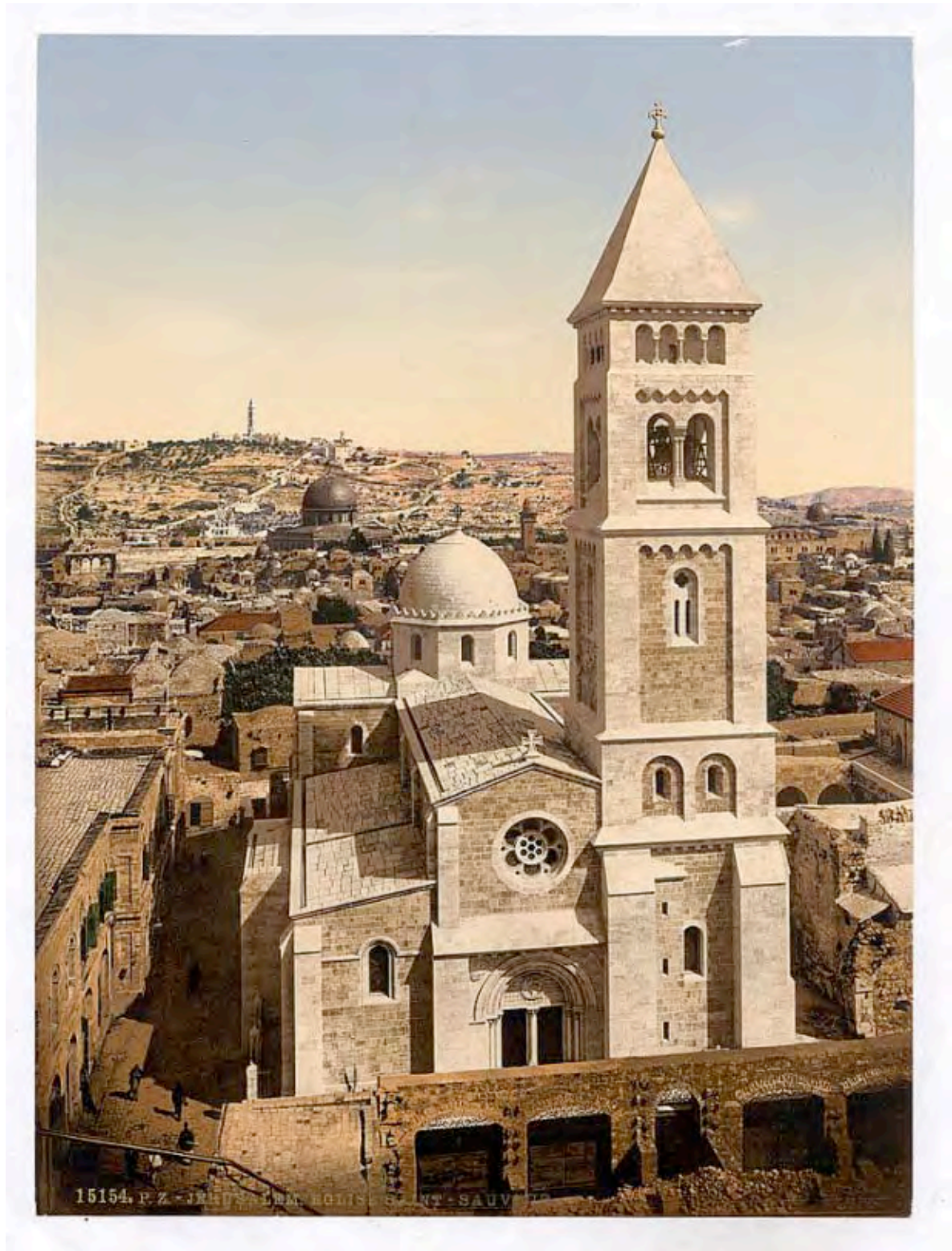


Fig. 5.241. Postcard depicting the Church of the Redeemer, Jerusalem. Wikimedia Commons.



Fig. 5.242. Gotthold Riegelmann, Auguste-Viktoria-Stiftung, bronze sculpture depicting a crusader after Kaiser Wilhelm II in courtyard. Photograph: Ana al' Ain.



Fig. 5.243. Gotthold Riegelmann, Auguste-Viktoria-Stiftung, bronze sculpture depicting Saint Elizabeth after Empress Victoria in courtyard. Photograph: Ana al' Ain.



Fig. 5.244. Unknown, Ekkehard and Uta in Naumburg cathedral (c. 1260) from Max Sauerlandt, *Deutsche Plastik des Mittelalters* (Düsseldorf and Leipzig: K.R. Langewiesche, 1909) fig. 65.



Fig. 5.245. Unknown, Saint Elisabeth holding up the Marburg cathedral, polychrome statue, c. 1470, Marburg. Photograph: Anne Seesholtz.

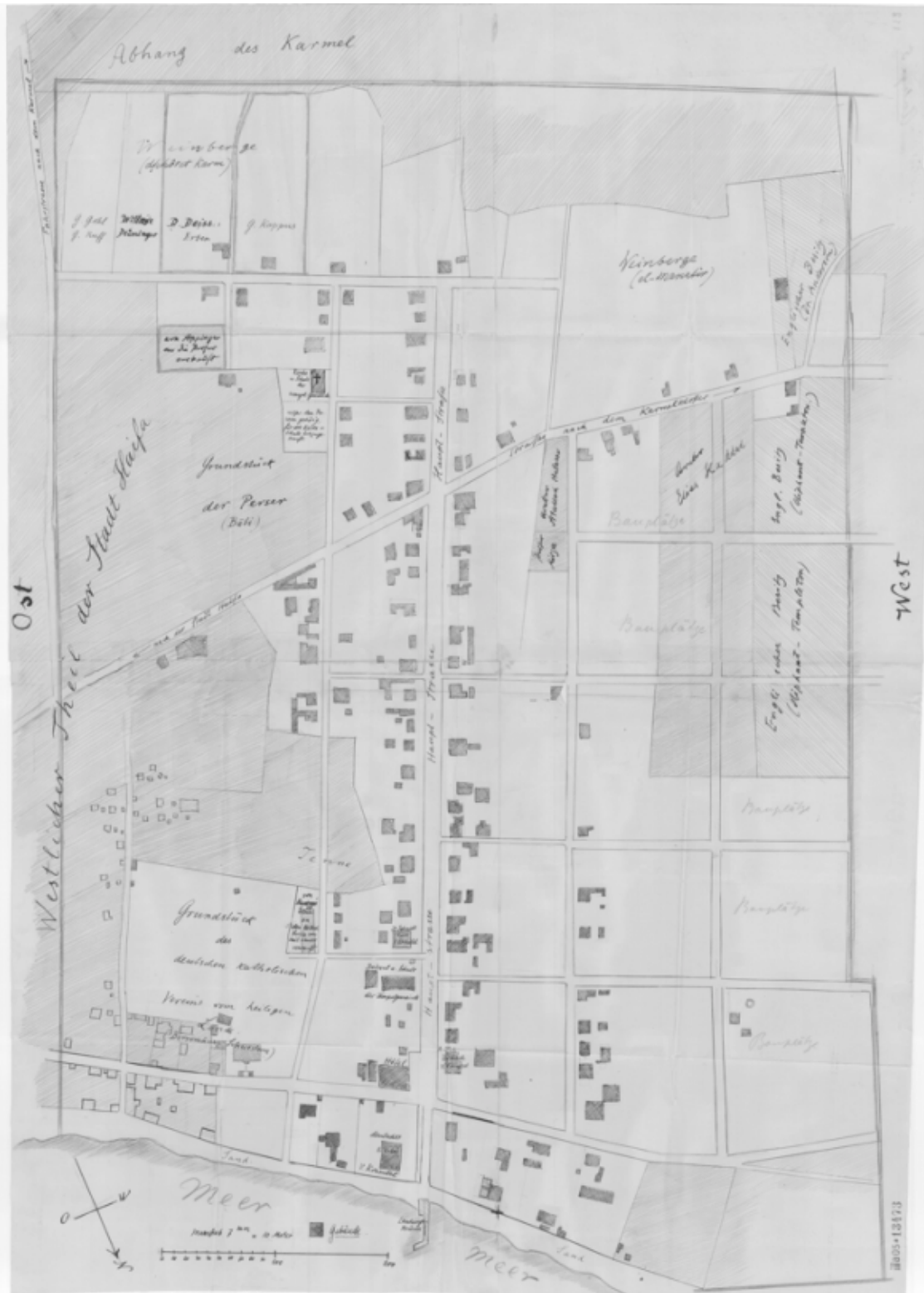


Fig. 5.246. Unknown, probably Gottlieb Schumacher, Map of the German colony, Haifa, 1900. Ba R901/30186.



Fig. 5.247. Composite image of biblical excerpts inscribed above entries of homes in the German Colony, Haifa. Photographs of the author.



Fig. 5.248. Entryway and biblical inscription of Gottlieb Schumacher's house at the Germany Colony, Haifa. Photograph of the author.



Fig. 5.249. Unknown, German embassy at Taksim, between 1880 and 1893, Abdul Hamid II collection. LOC lot 9516, no. 23.



Fig. 5.250. Pascal Sébah & Policarpe Joallier, view of the German embassy in Taksim, c. 1906. DAII fotothek 9997 R 27.856. ©DAI.



Fig. 5.251. View the fountain donated to the German consulate in İstanbul on behalf of Sultan Abdülhamid II, 1906. Photograph: Ö. Kürklü.



Fig. 5.252. Plan of the German ambassador's residence at Tarabya, 1908. AK.



Fig. 5.253. Pascal Sebah & Policarpe Joaillier, view of the German ambassador's residence at Tarabya, sea façade, 1893. DAII fotothek. ©DAI.



Fig. 5.254. Hamam at the German ambassador's residence at Tarabya converted into a chapel, c. 1889. Photograph: Ö. Kürklü.



Fig. 5.255. Deutsche Orientbank, Sirkeci, street view. Photograph of the author.



Fig. 5.256. Deutsche Orientbank, Sirkeci, entryway detail. Photograph of the author.



Fig. 5.257. Deutsche Orientbank, Sirkeci, cupola detail. Photograph of the author.



Fig. 5.258. Deutsche Orientbank, Sirkeci, interior view. Photograph of the author.



Fig. 5.259. Deutsche Orientbank, Sirkeci, façade detail. Photograph of the author.



Fig. 5.260. Deutsche Orientbank, Sirkeci, façade detail. Photograph of the author.

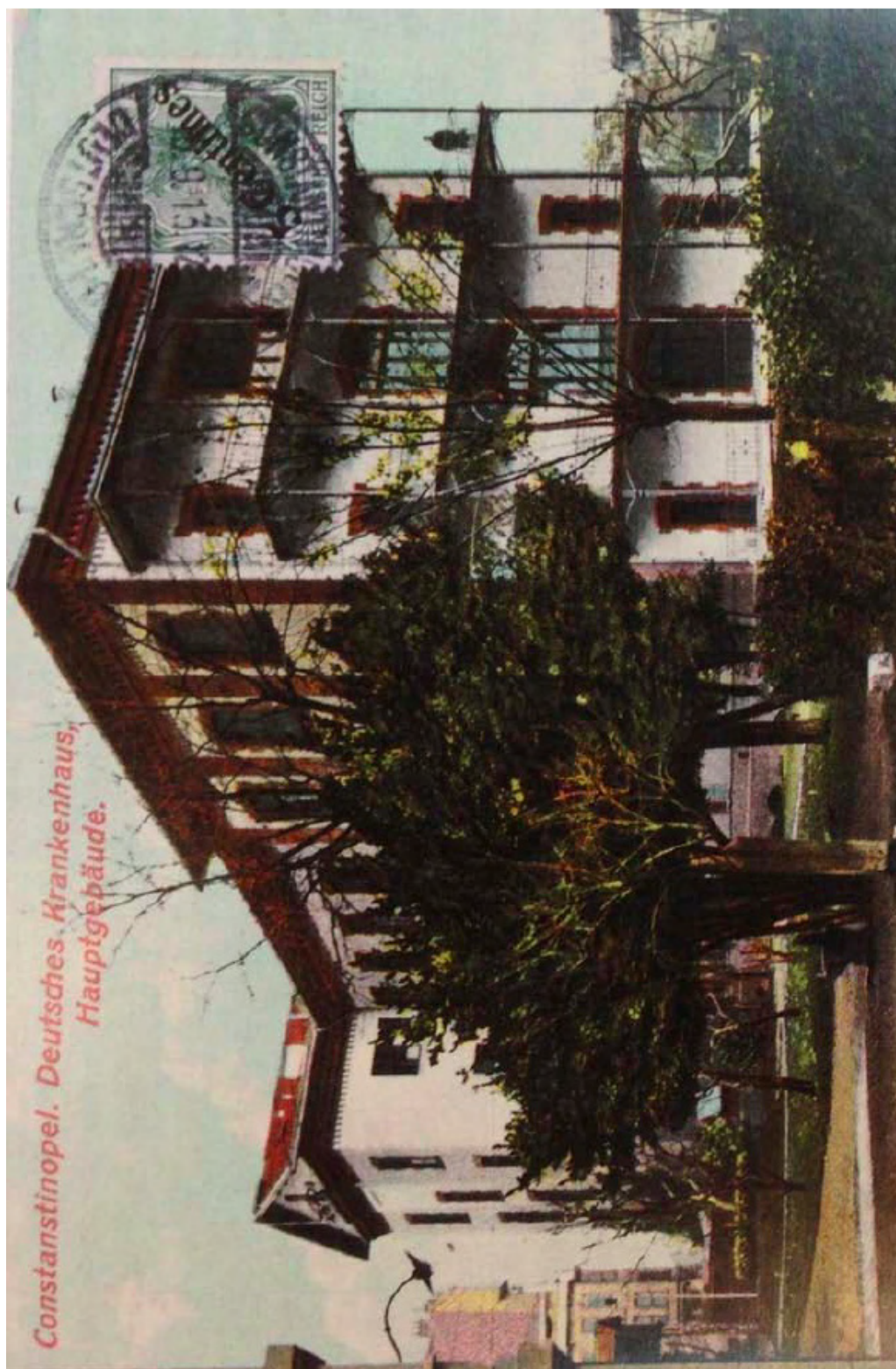


Fig. 5.261. Postcard depicting the German Hospital, main building, in Beyoğlu, 1913-14. SALT Research.

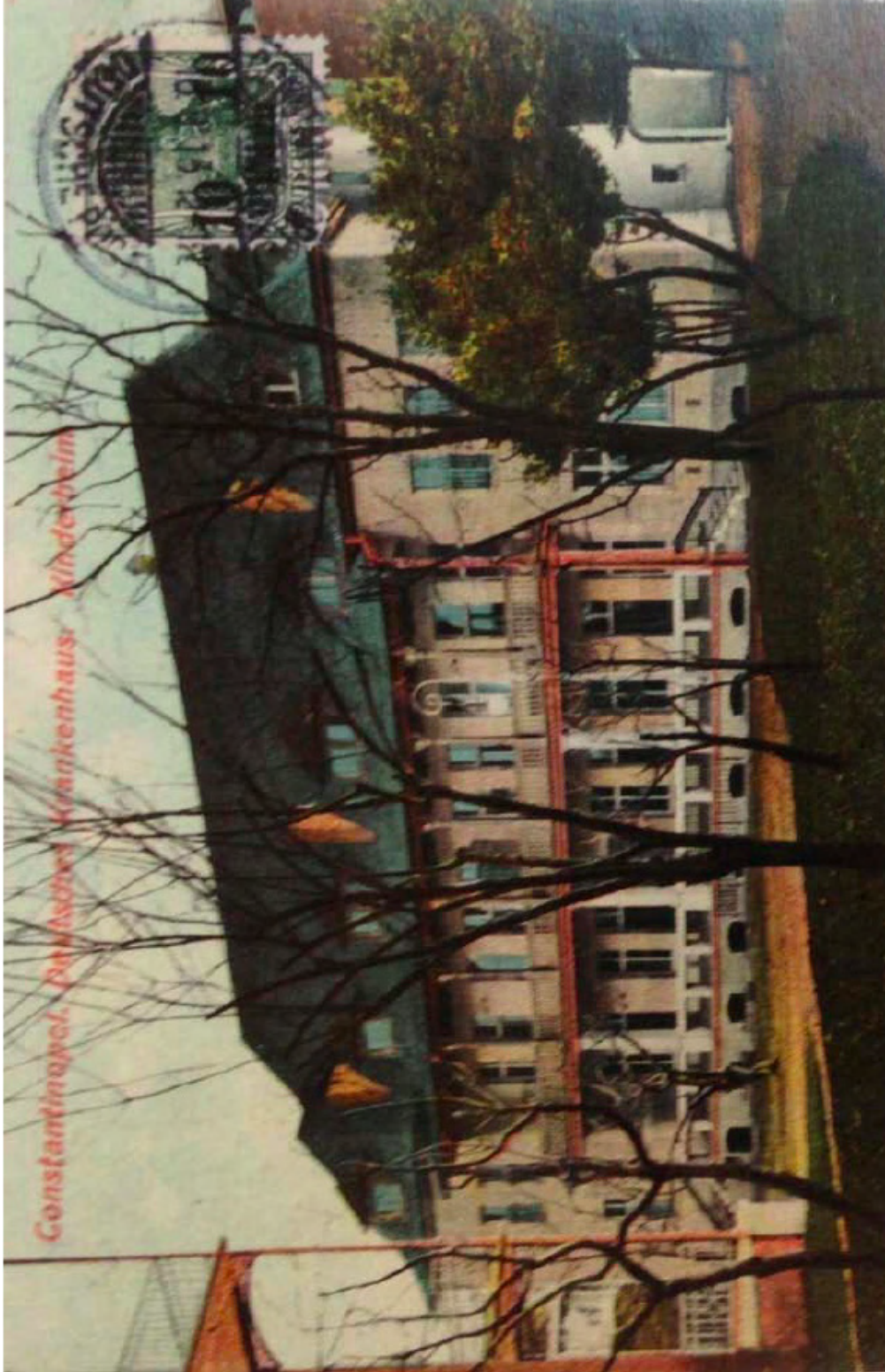


Fig. 5.262. Postcard depicting the German Hospital, children's building, in Beyoğlu, 1913-14.
SALT Research .

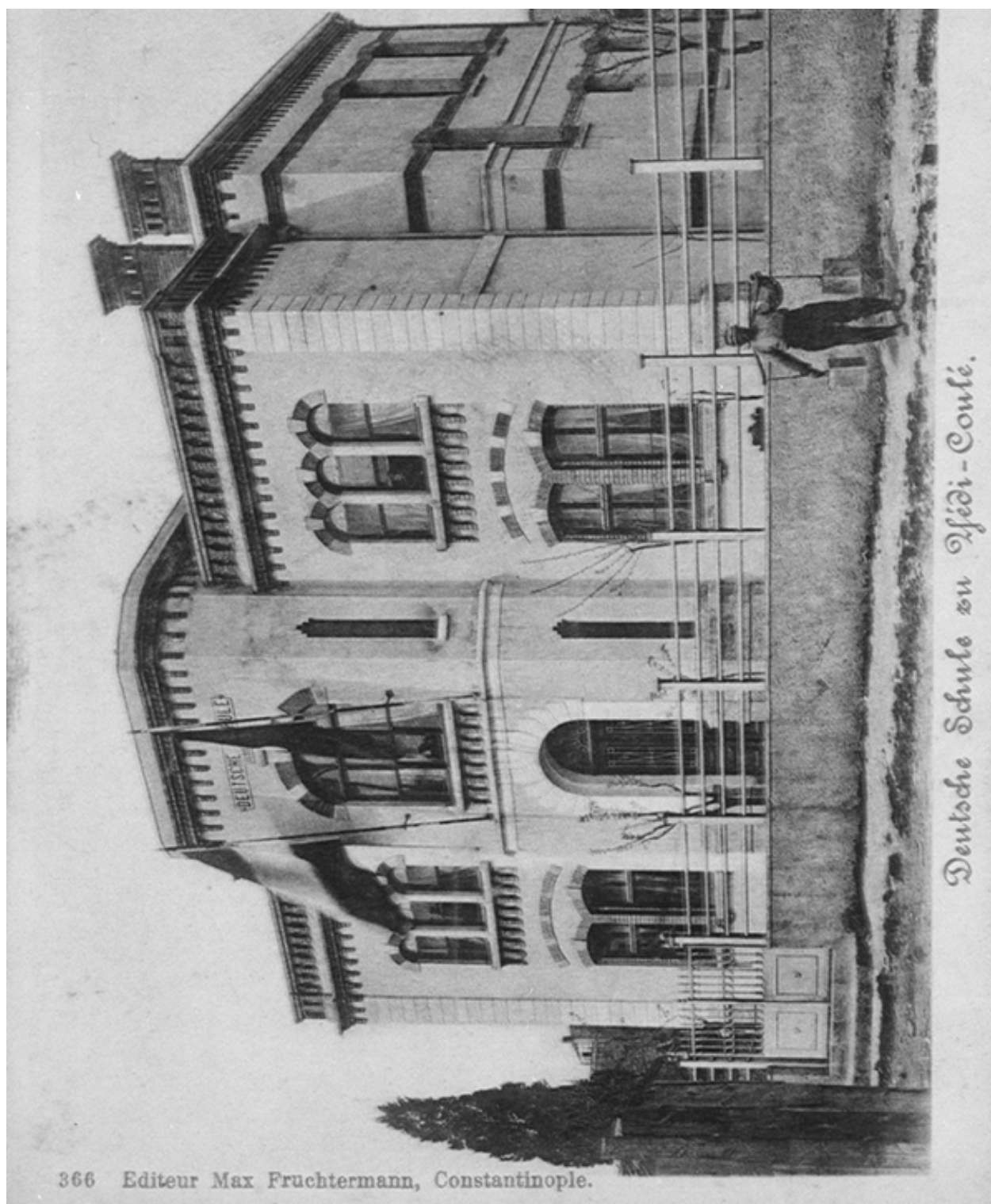


Fig. 5.263. Unknown, view of the German school at Yedikule. DAII R 26.343. ©DAI.



Fig. 5.264. Unknown, view of the German school at Beyoğlu. DAI 7044. ©DAI.



Fig. 5.265. Unknown, view of the German school at Taksim. DAI 7042. ©DAI.



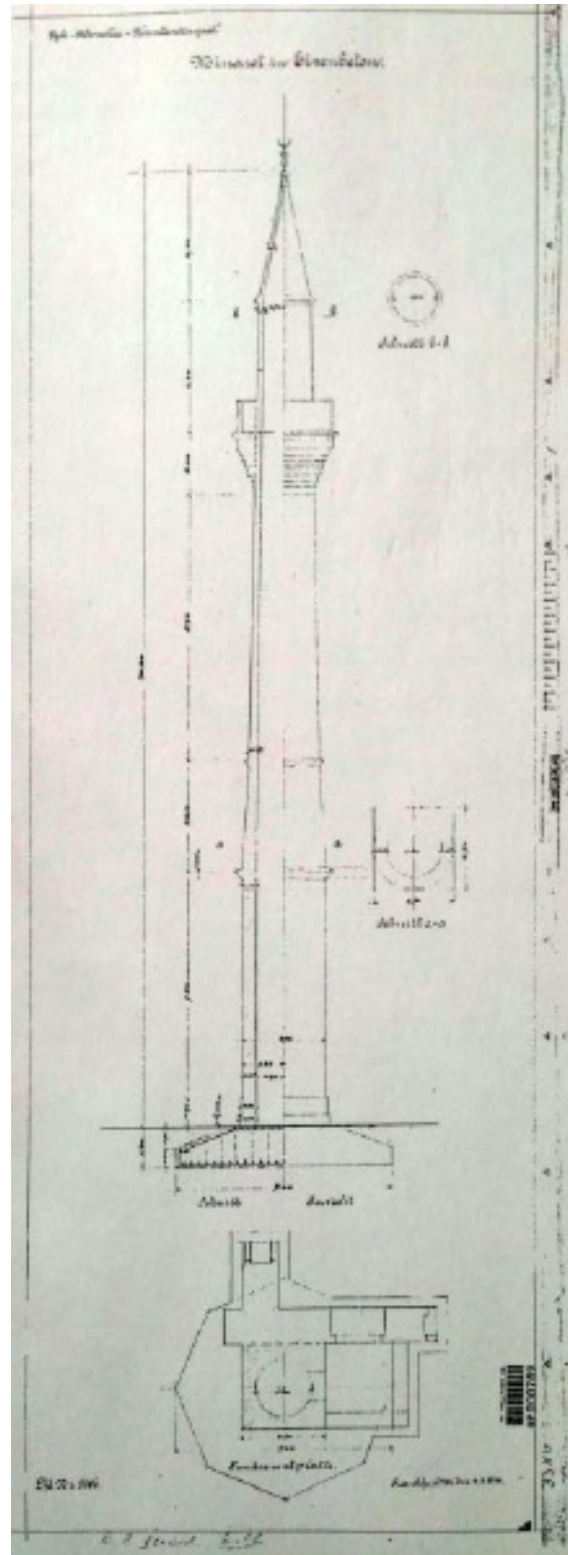
Fig. 5.266. Unknown, view of a chemistry class at the German Girl's School, İstanbul. DAI 7018. ©DAI.



Fig. 5.267. Unknown, view of a *Turnen* class at the German Girl's School, İstanbul. DAI 7021.
©DAI.

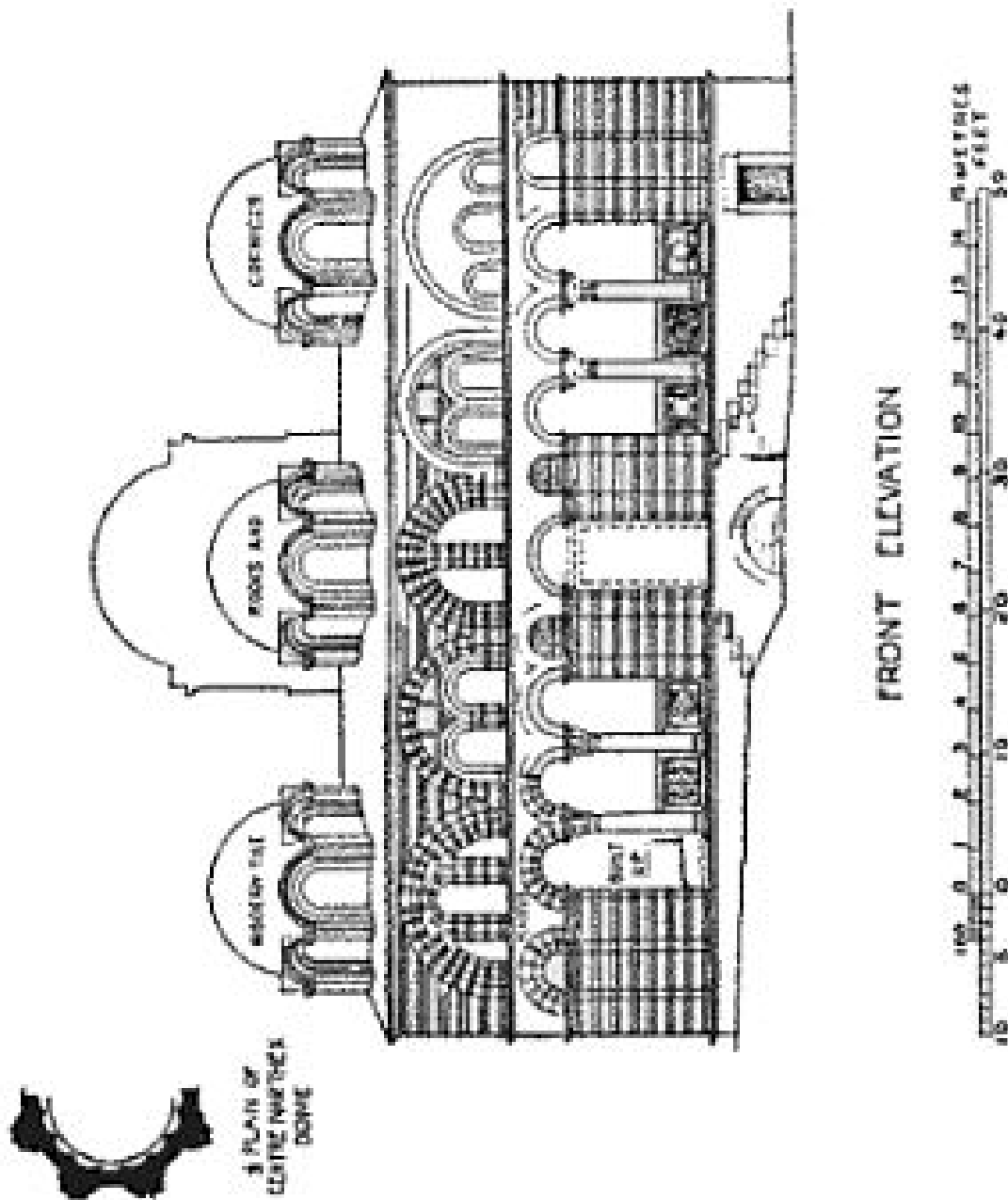


Fig. 5.268. Konya station, workers' colony, view of a child's swing in the garden of an engineer's house. Photograph of the author.



5.269. Phillip Holzmann GmbH, design for a minaret in ferroconcrete for the Vefa Kilise Mosque, c. 1912. ISg TA H 106.

S. THEODORE THE TIRO



5.270. Alexander von Millingen (attributed), elevation of the Vefa Kilise mosque from Alexander von Millingen, *Byzantine Churches of Constantinople: Their History and Their Architecture* (London: Macmillian and Co., Ltd., 1912), 245.

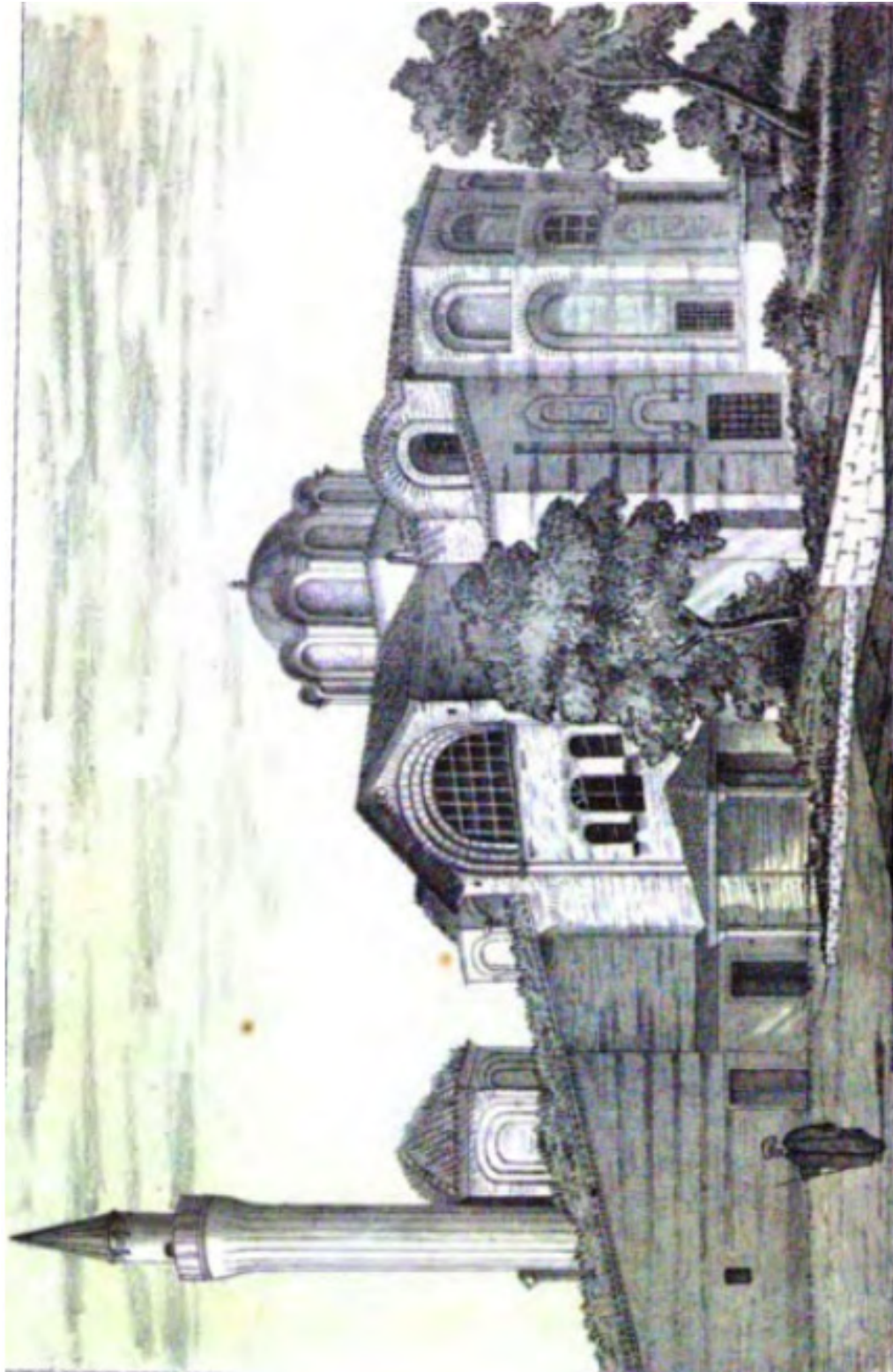


Fig. 5.271. “Faranakhe”, view of the Vefa Kilise Mosque from Alexandros Geōrgiou Paspātēs, *Vyzantinai Meletai Topographikai kai Historikai Meta Pleistōn Eikonōn* (Kōnstantinoupolei: Ek Tou typographeiou A. Koromēla, 1877), 353.

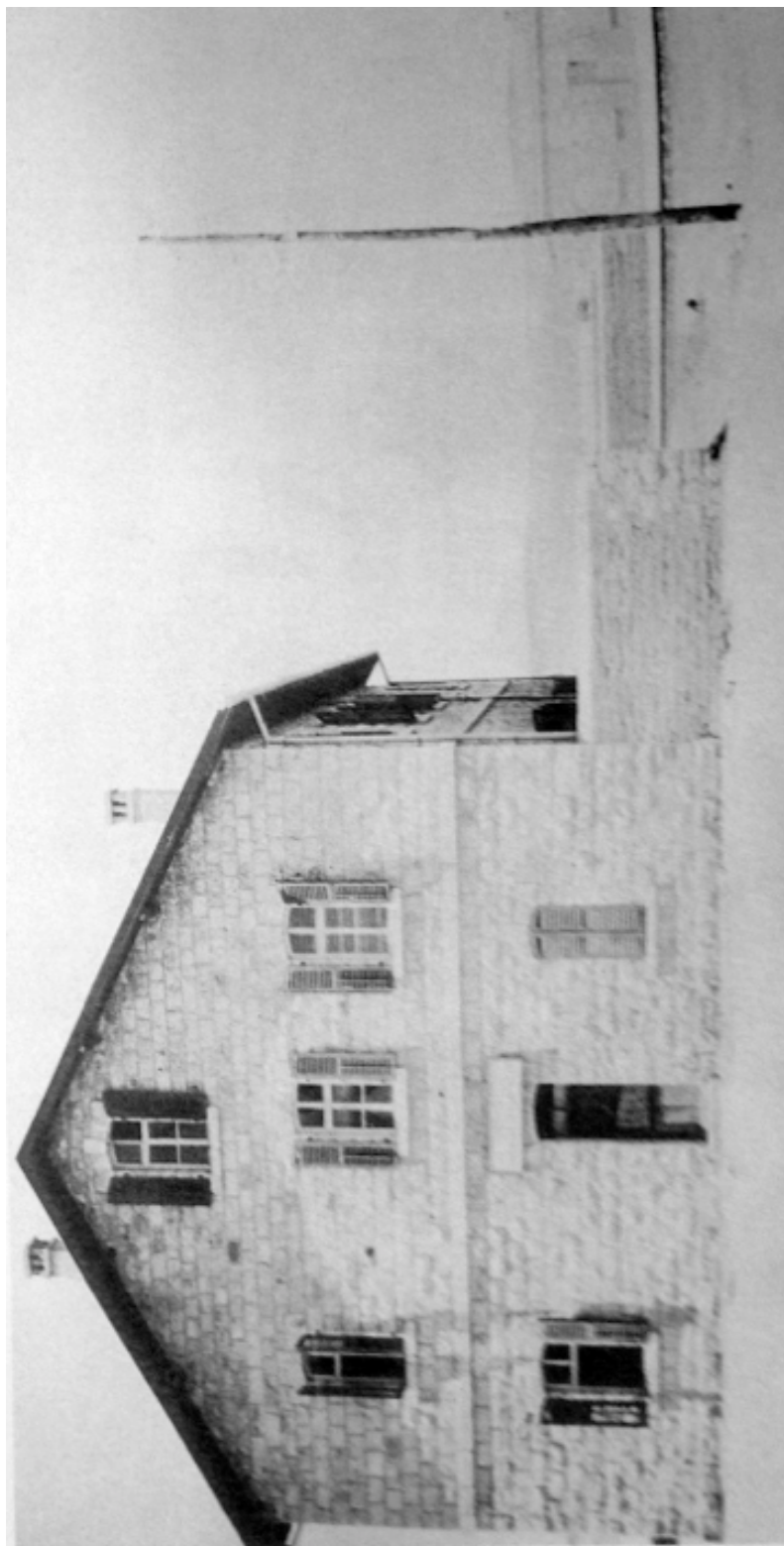


Fig. 5.272. Unknown, Heinrich August Meißner's house at Ma'an station. Photograph: Durham University.



Fig. 5.273. Interior view of the mosque fashioned from a rail car for the Hejaz Railway on the cover of *Servet-i Fünun* 534 [1908].



Fig. 5.274. Weiss, Frankfurt a.M, view of the third class passenger cars for the Hejaz railway, constructed by the Sueddeutsche Waggon-Fabrik A.G of Kelsterbach, c. 1910. BOA FTG 1962 001 001.



Fig. 5.275. View of the al Anbarya mosque. Photograph: Almiskeenah.



Fig. 5.276. Aerial view of the al Anbarya mosque. Photograph: Almiskeenah.

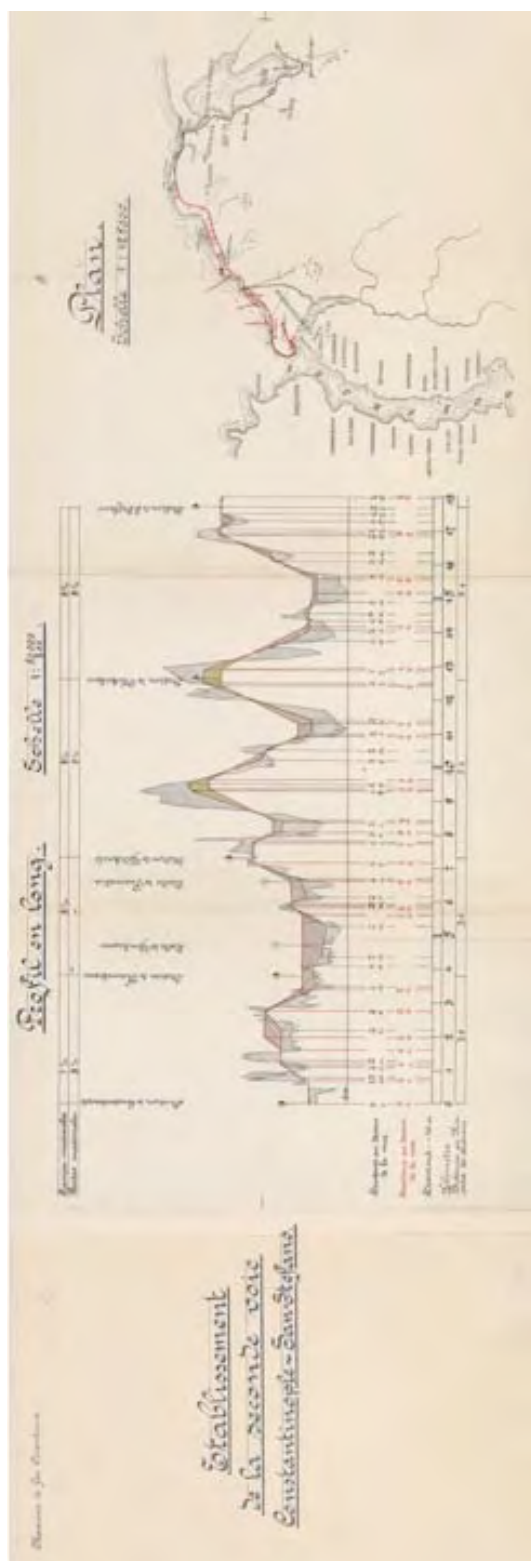


Fig. 5.277. Chemins de Fer Orientaux, section and plan of the Sirkeci-San Stefano rail line, c. 1888. OSa Kt.03 / IX C 38a / Nr.11.

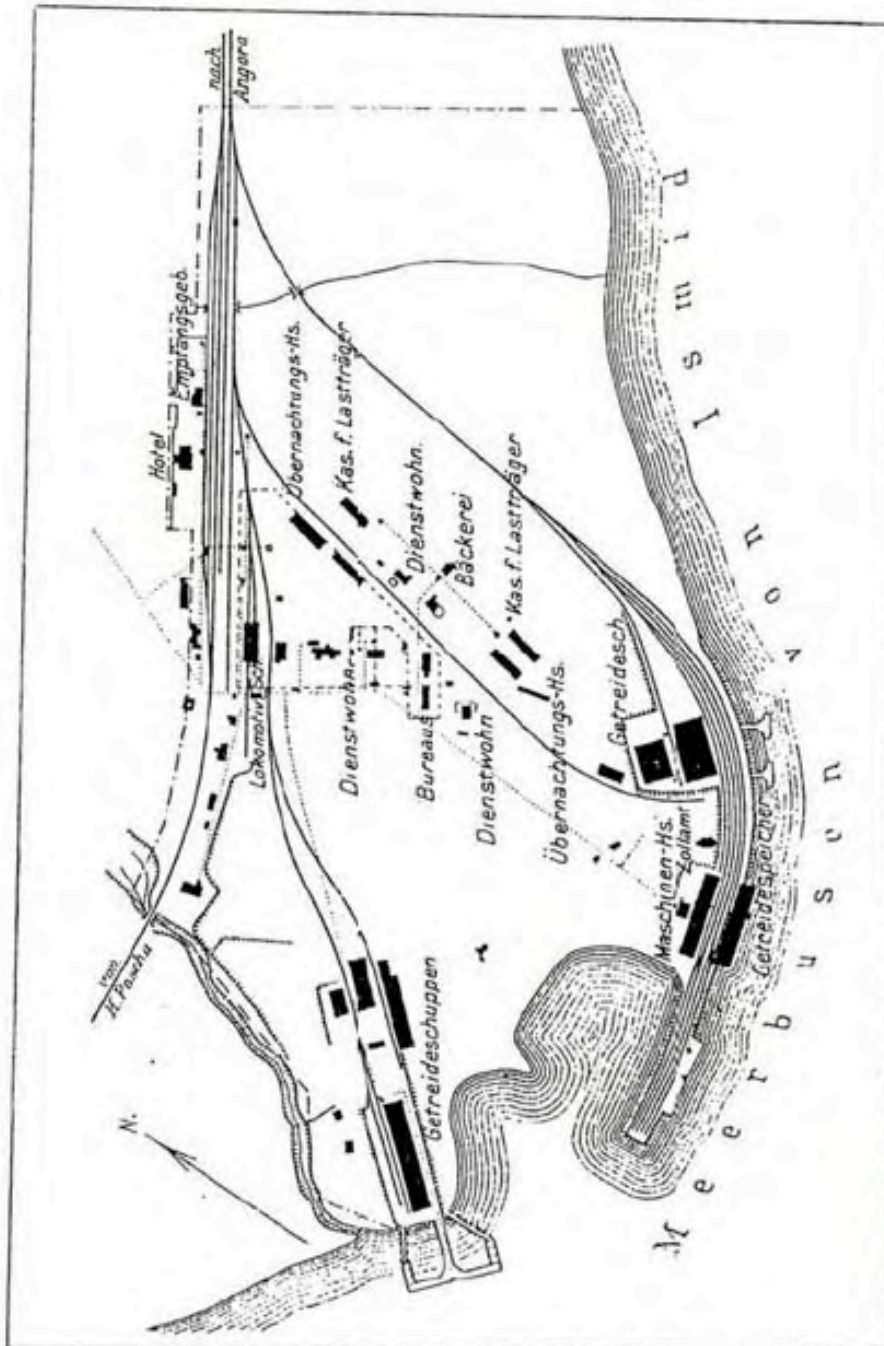


Fig. 5.278. İzmit station, site plan with port, 1908. TCDD 10A-443.



Fig. 5.279. Reichskolonialamt, map of the roads bordering the terrain of the imperial railway (Windhoek), c.1901. Ba R1001/1208 K-1 fiche 1.

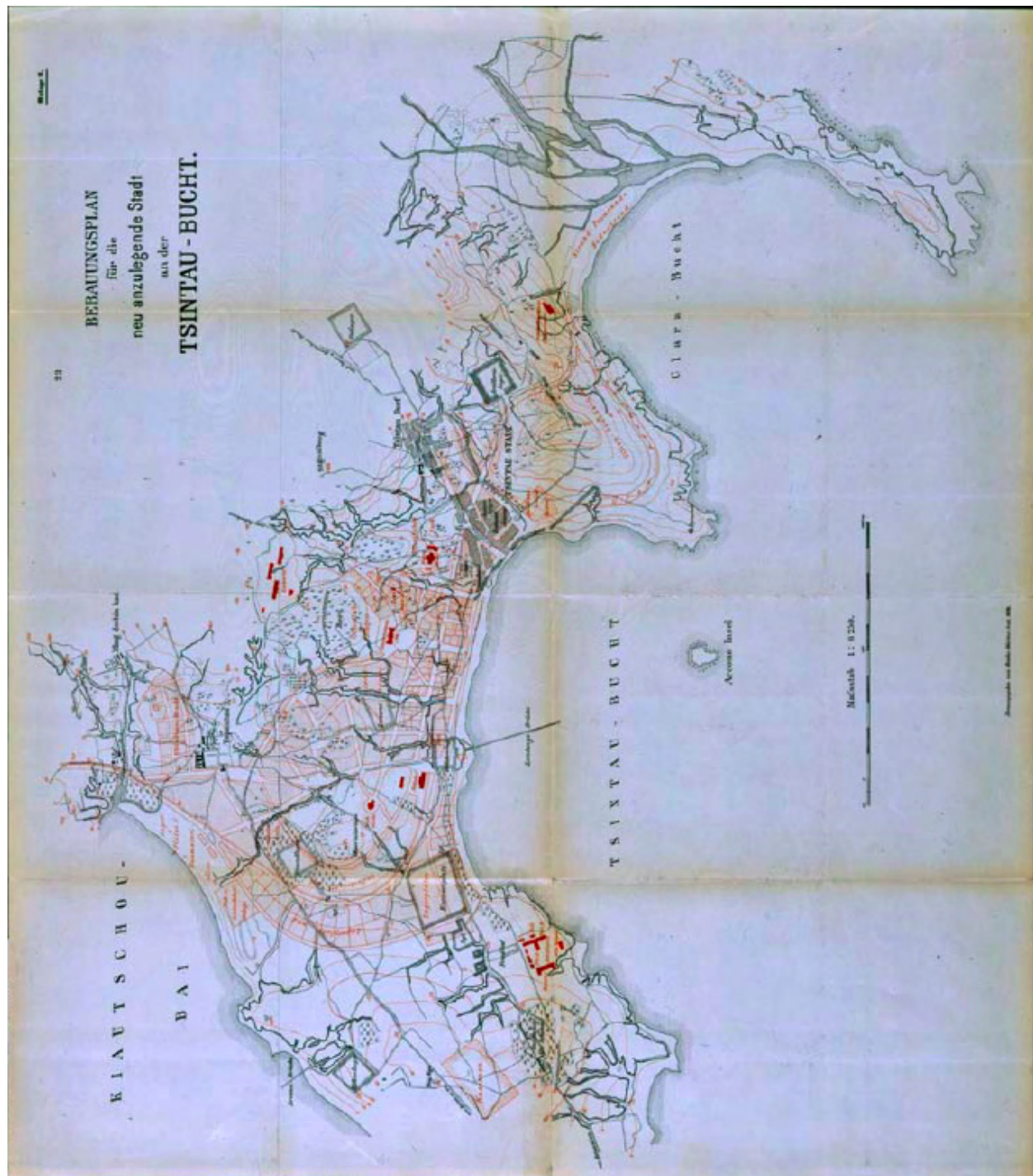


Fig. 5.280. Reichskolonialamt, development plan for Tsingtao Bay, 1898. Ba R1001/658 K-1, fiche 1.

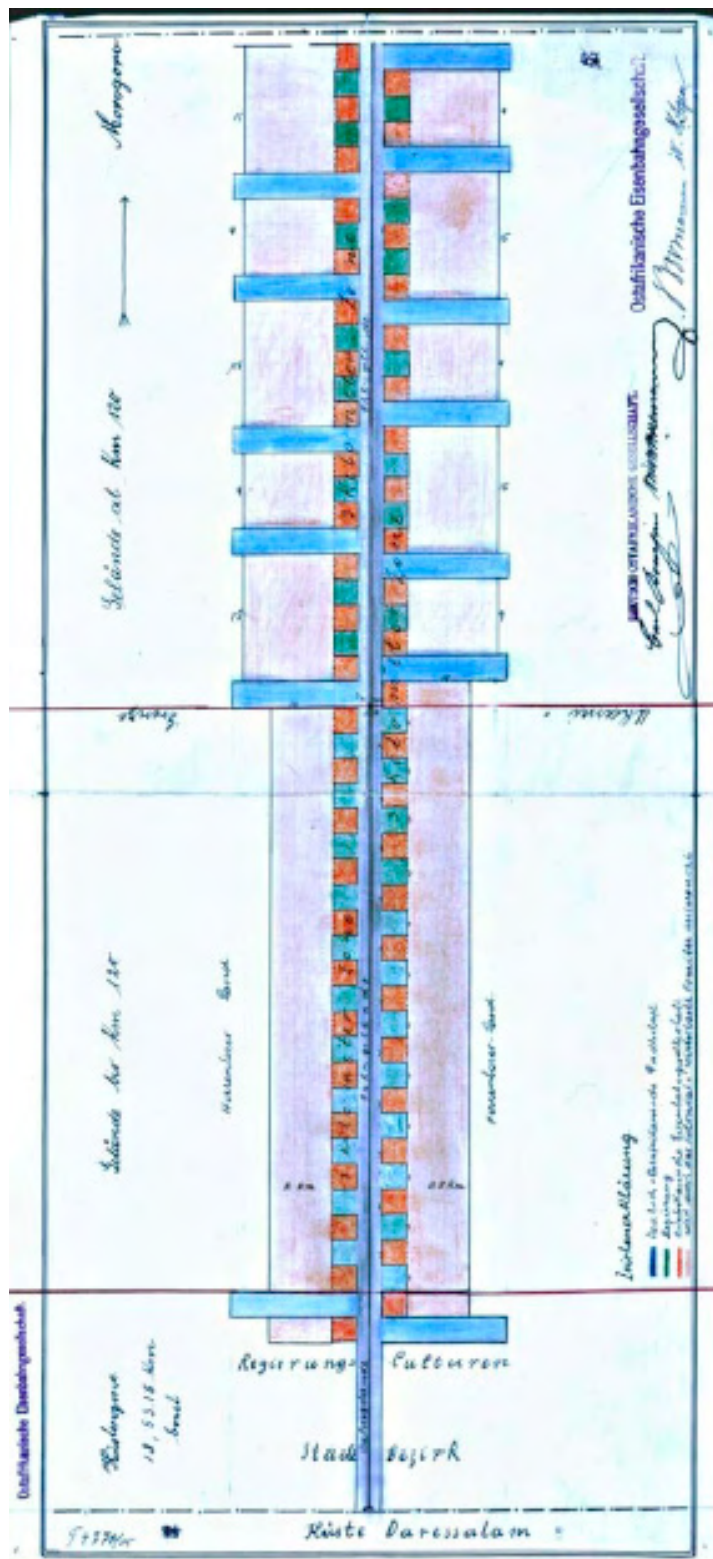


Fig. 5.281. Deutsche-Ostafrikanische Gesellschaft, Ostafrikanische Gesellschaft, map showing the land appropriation of the Dar es Salaam-Morogoro Rail, c. 1903. Ba R1001/97 K-3, fiche 1.



Fig. 5.282. Unknown, artist's interpretation of Philipp Holzmann GmbH's construction of the railway in German East Africa (Tanzania), c. 1896. ISg W 1/2 278.

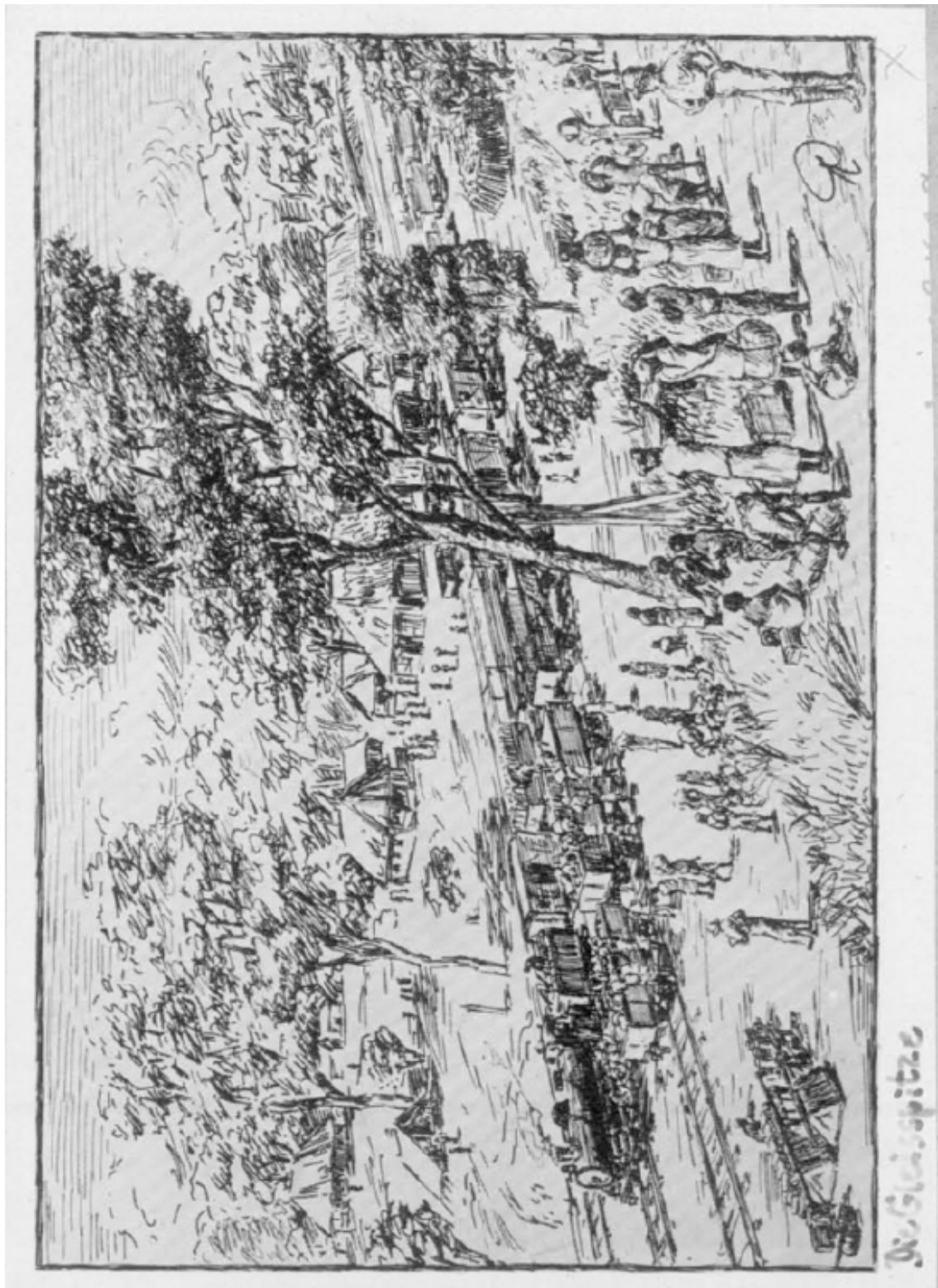


Fig. 5.283. Unknown, artist's interpretation of Philipp Holzmann GmbH's construction of the railway in German East Africa (Tanzania), c. 1896. ISg W 1/2 278.

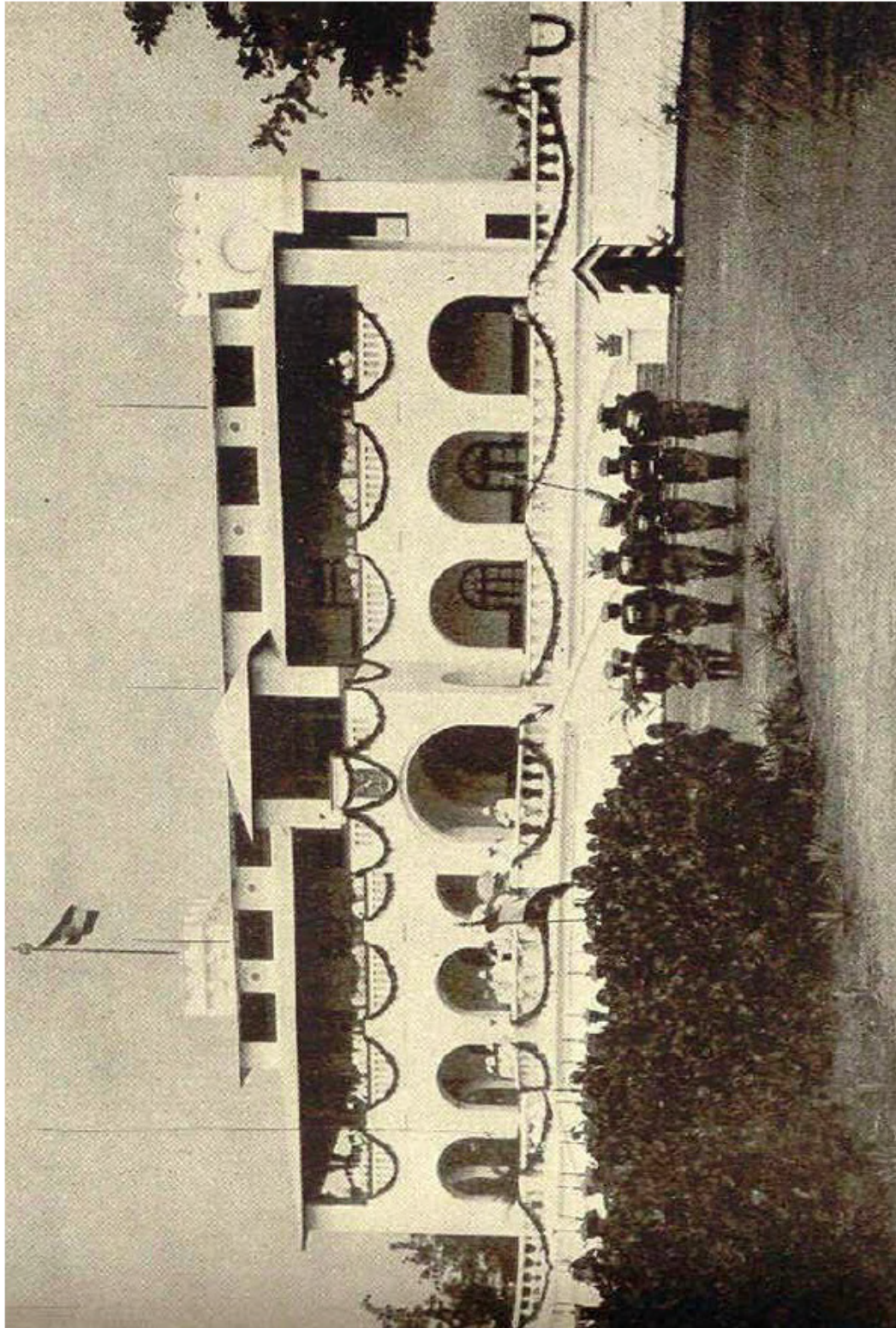


Fig. 5.284. Unknown, view of German administration headquarters in Lomé, Togo, c. 1888. Harvard University Libraries Aga Khan Documentation Center.

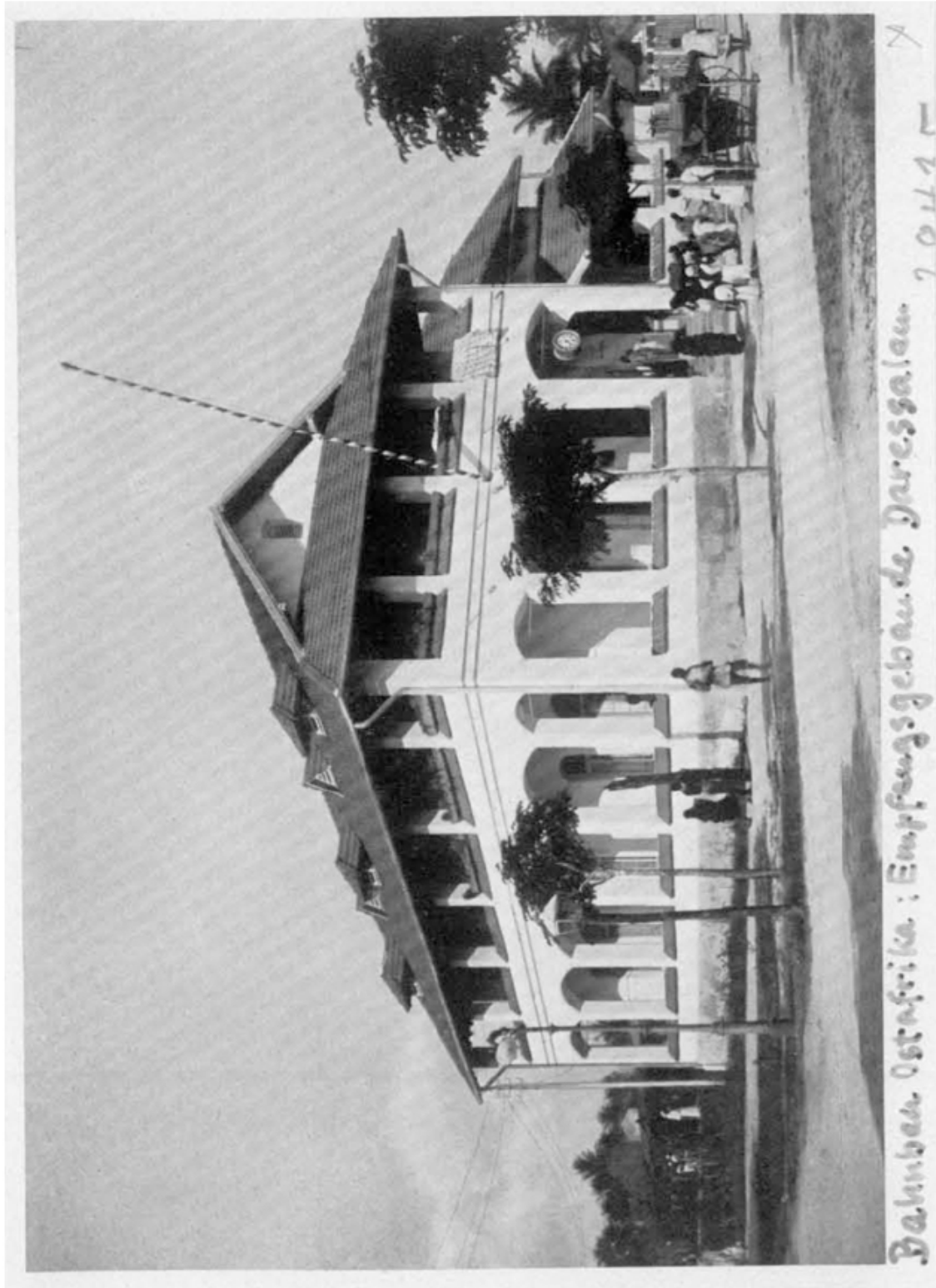


Fig. 5.285. Unknown, Photo of Philipp Holzmann GmbH's main train station at Dar es Salaam, c. 1905. Harvard University Libraries Aga Khan Documentation Center.

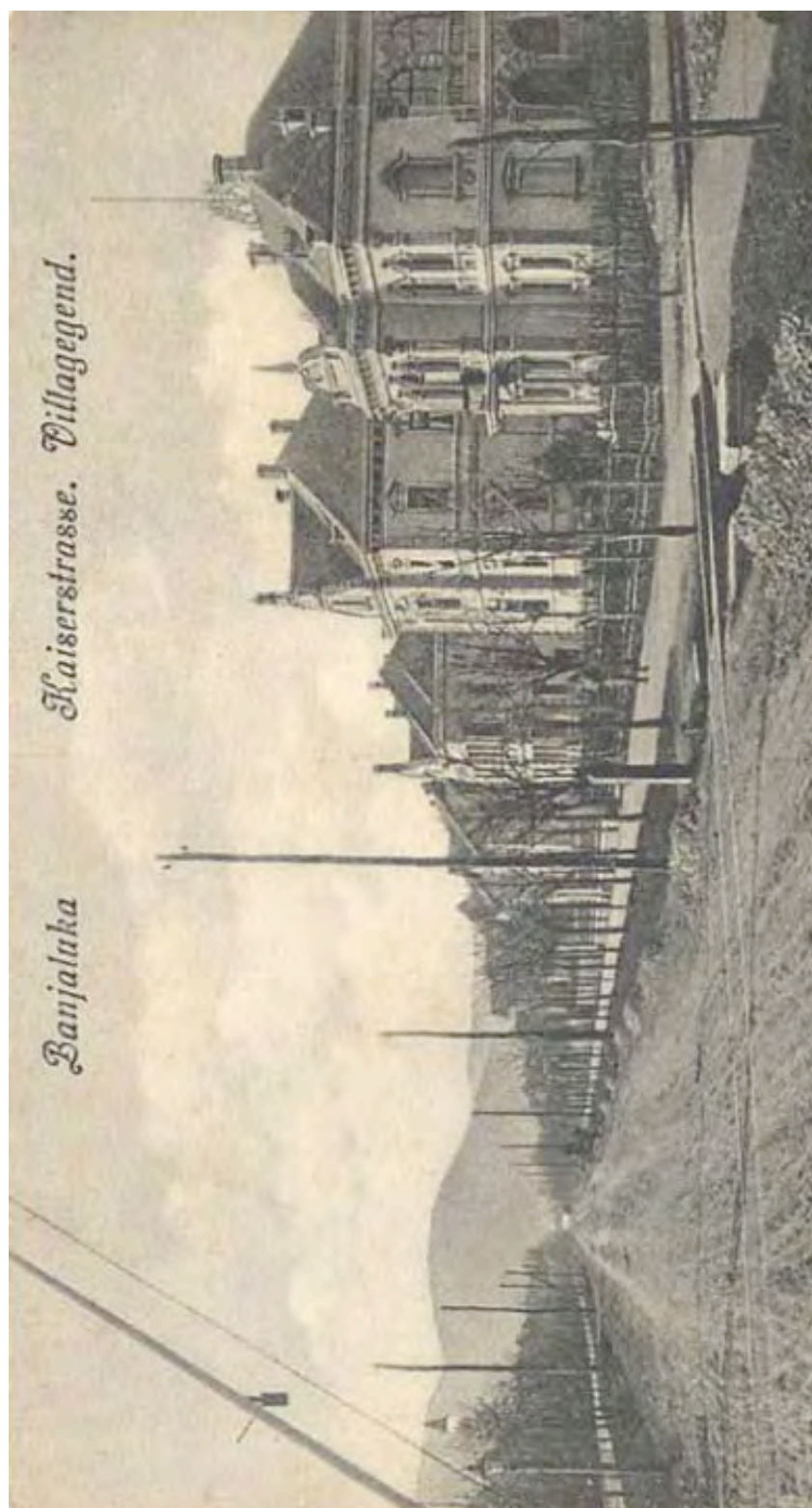


Fig. 5.287. Postcard depicting the Drum Carski (Kaiserstrasse), Banja Luka, c. 1880. Wikimedia Commons.



Fig. 5.288. Postcard depicting the Gospodska Ulica (Herrengasse), Banja Luka, c. 1880. Wikimedia Commons.

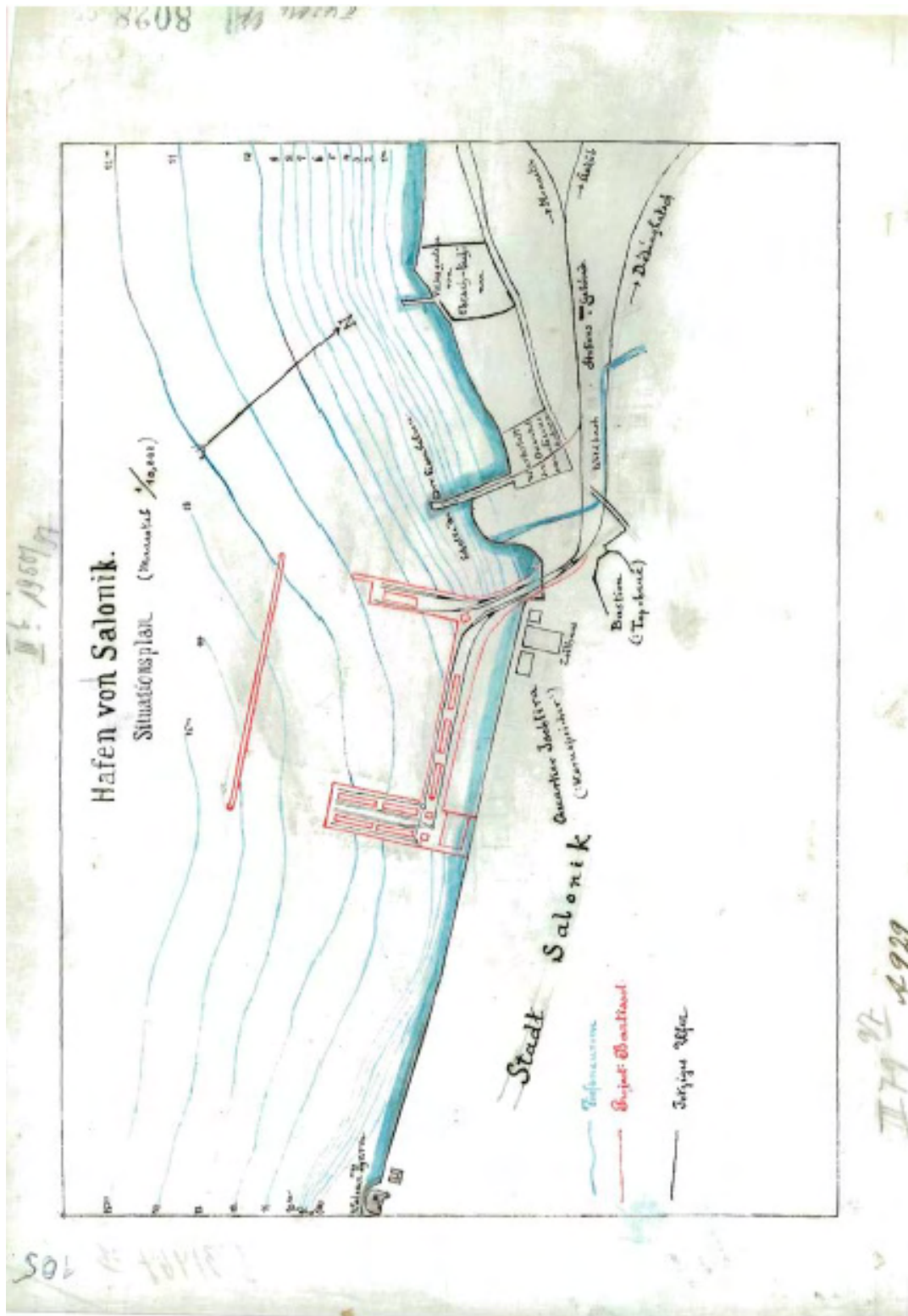


Fig. 5.289. Unknown, sketch of a plan for rail and port construction in Thessaloniki, c. 1898. Ba R901/1170.

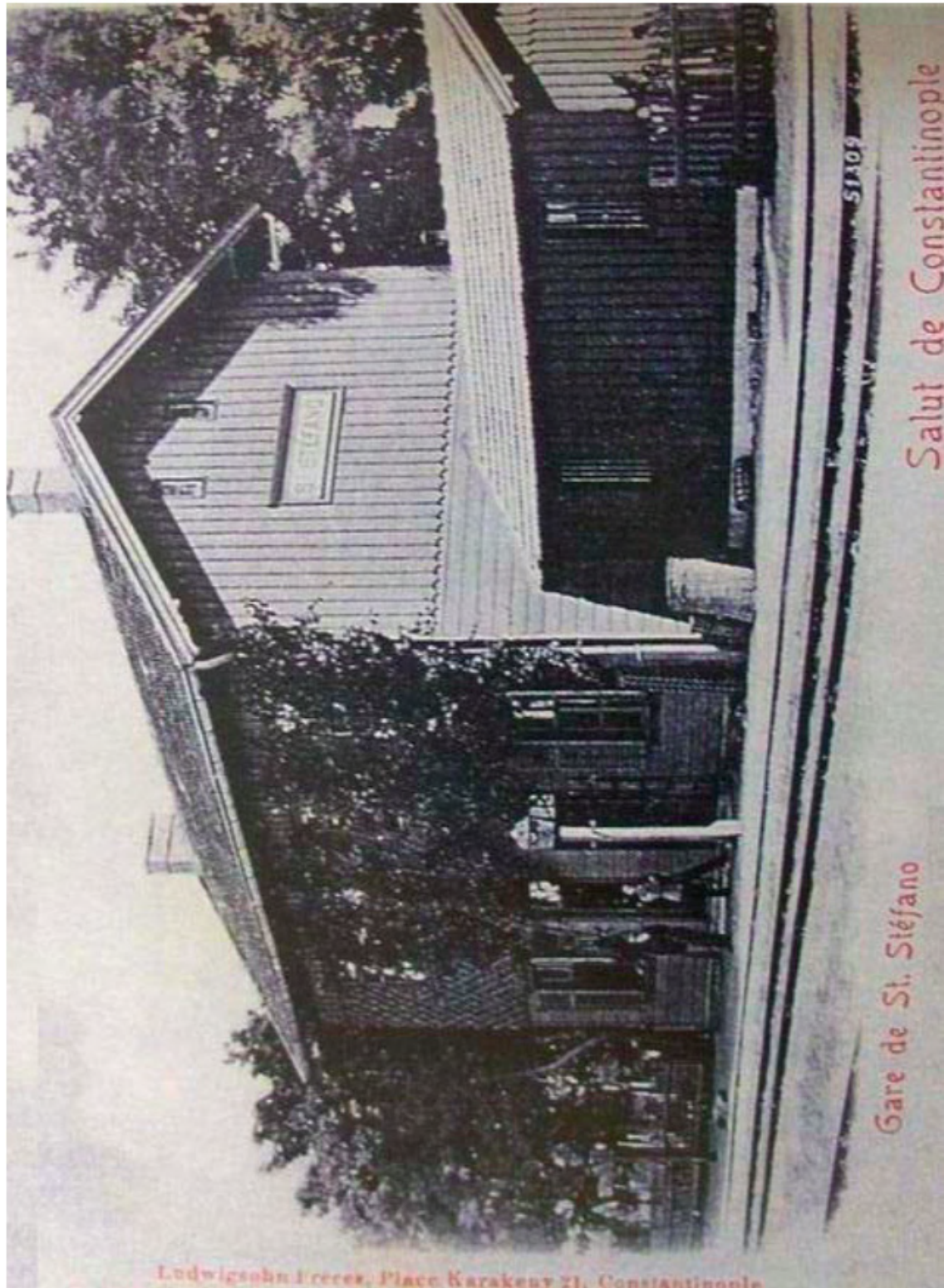


Fig. 5.291. Postcard depicting St. Stefano train station, c. 1890. Wikimedia Commons.



Fig. 5.292. Postcard depicting Sirkeci station, İstanbul, 1896. Wikimedia Commons.

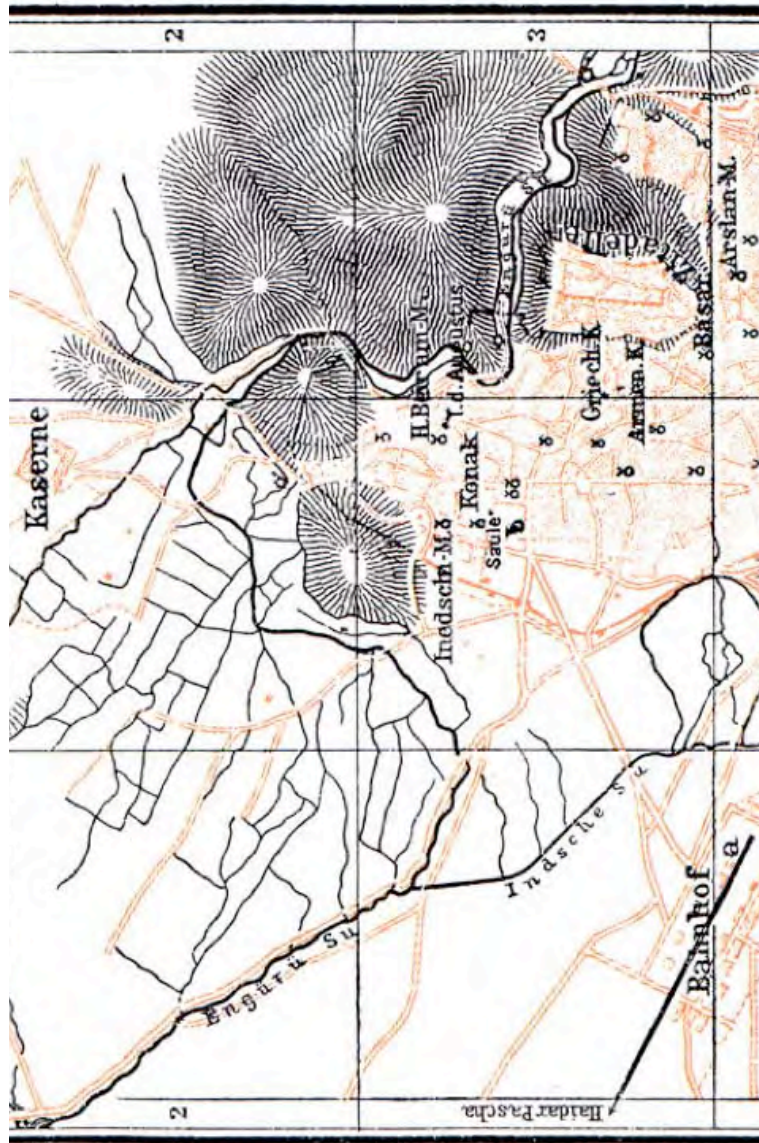


Fig. 5.293. Map of Ankara (detail), 1903. Wagner & Debes, Leipzig.



Fig. 5.294. Konya station, frontal view of the Baghdad Hotel. Photograph of the author.

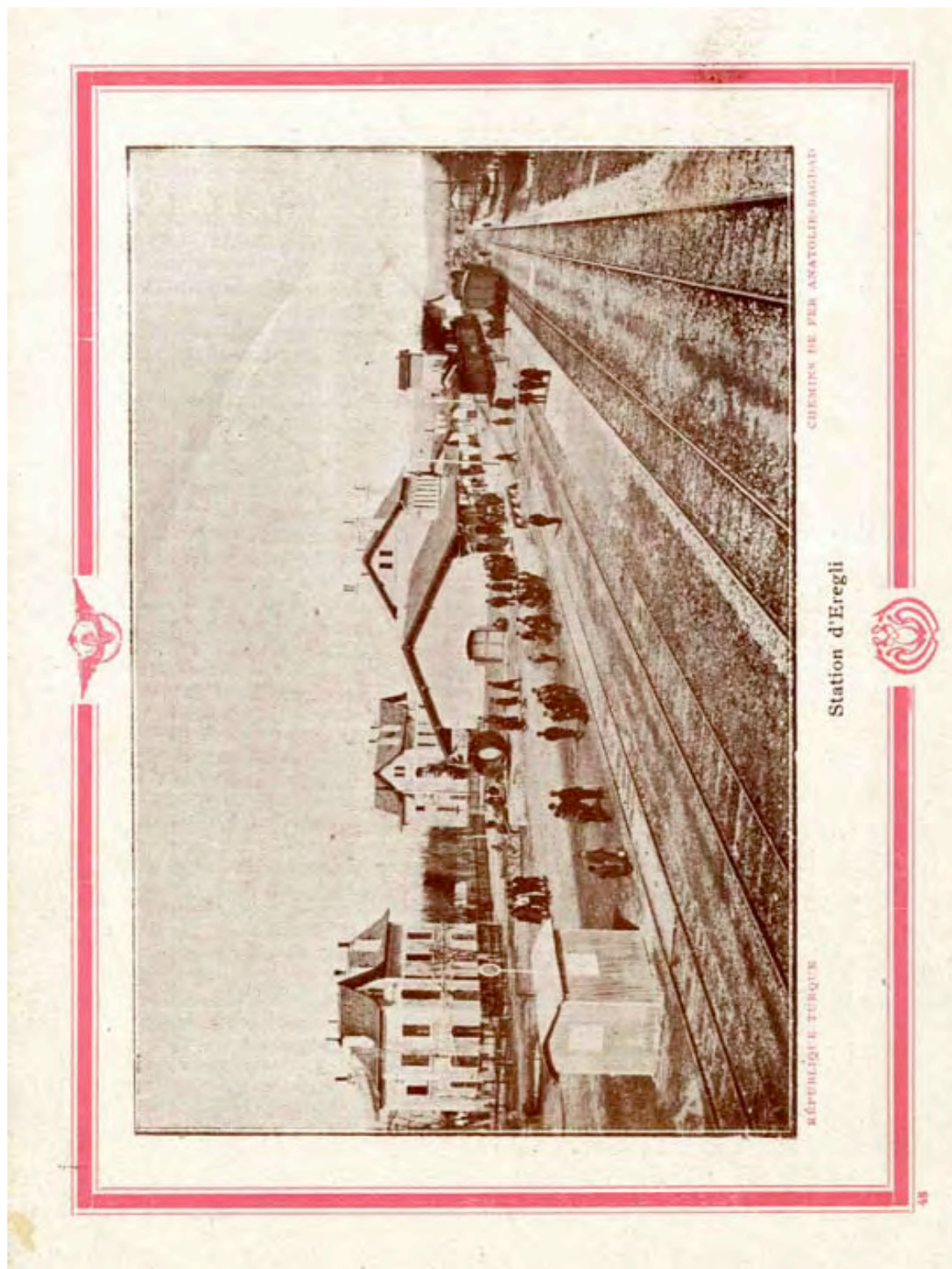


Fig. 5.295. View of Ereğli station, c. 1926. Photograph: Chemins de Fer Antolie-Bagdad. Harvard University Libraries.



Fig. 5.296. Guillaume Gustave Berggren, view of Ereğli train station and environs, c. 1906. DAI Fotothek. ©DAI.



Fig. 5.297. Guillaume Gustave Berggren, view of Ereğli train station and environs, c. 1906. DAI Fotothek. ©DAI.



Fig. 5.298. Exterior view, Özkoçlar Butik Otel, previously a villa belonging to a prosperous Armenian family, adjacent to the train station and off of the main boulevard of Ereğli with gas lamps in foreground. Photograph of the author.

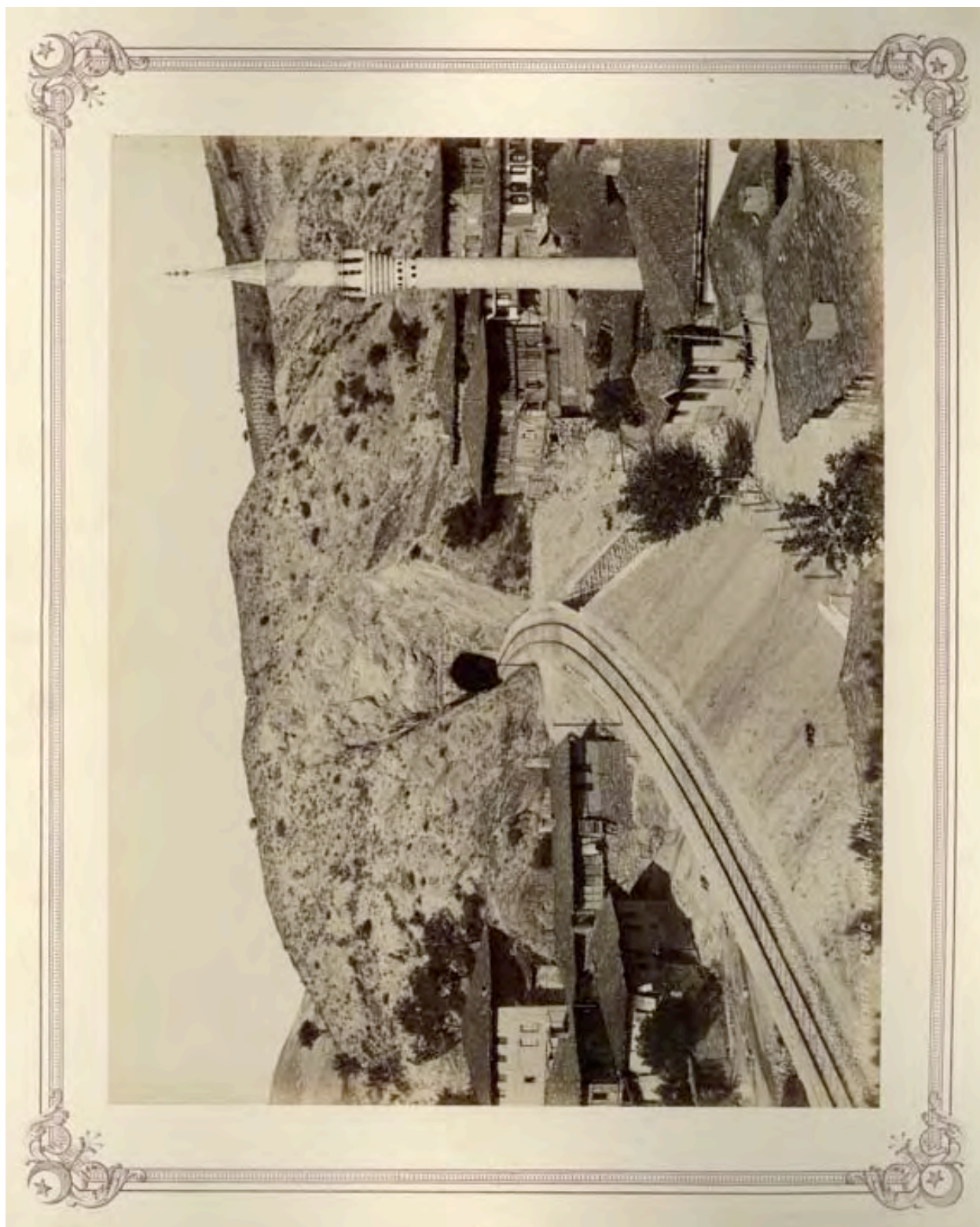


Fig. 5.299. Guillaume Gustave Berggren, View of the Anatolian Railway, tunnel at Bekdemir (Pékdemir), c. 1893. NLa Ernst Mackensen Nachlass, 240 N Nr. VIII 6.

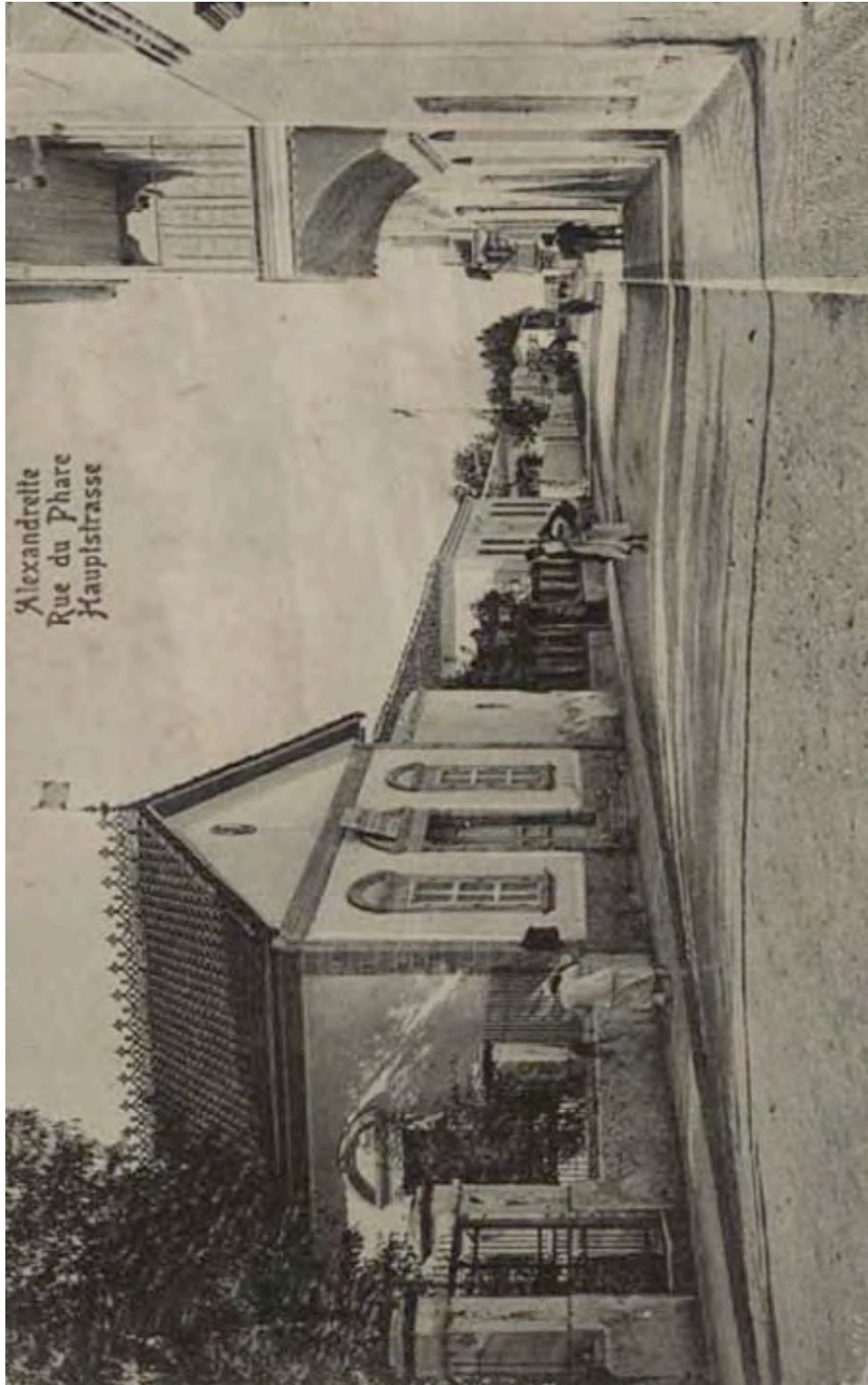


Fig. 5.300. Postcard depicting the main street connecting the railway station to the port, Iskenderun, c. 1914. Wikimedia Commons.

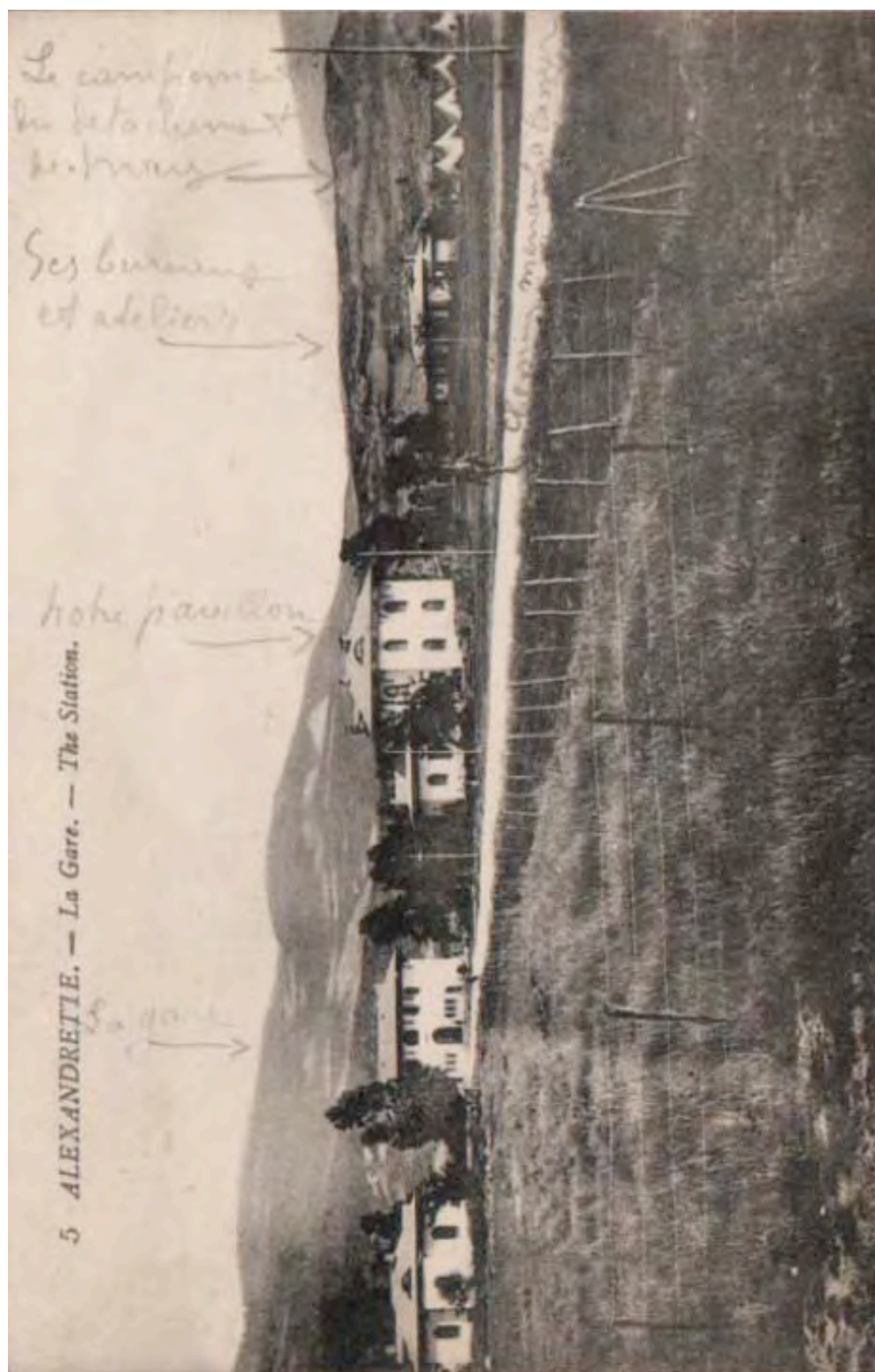


Fig. 5.301. Postcard depicting İskenderun station, c. 1914. Wikimedia Commons.

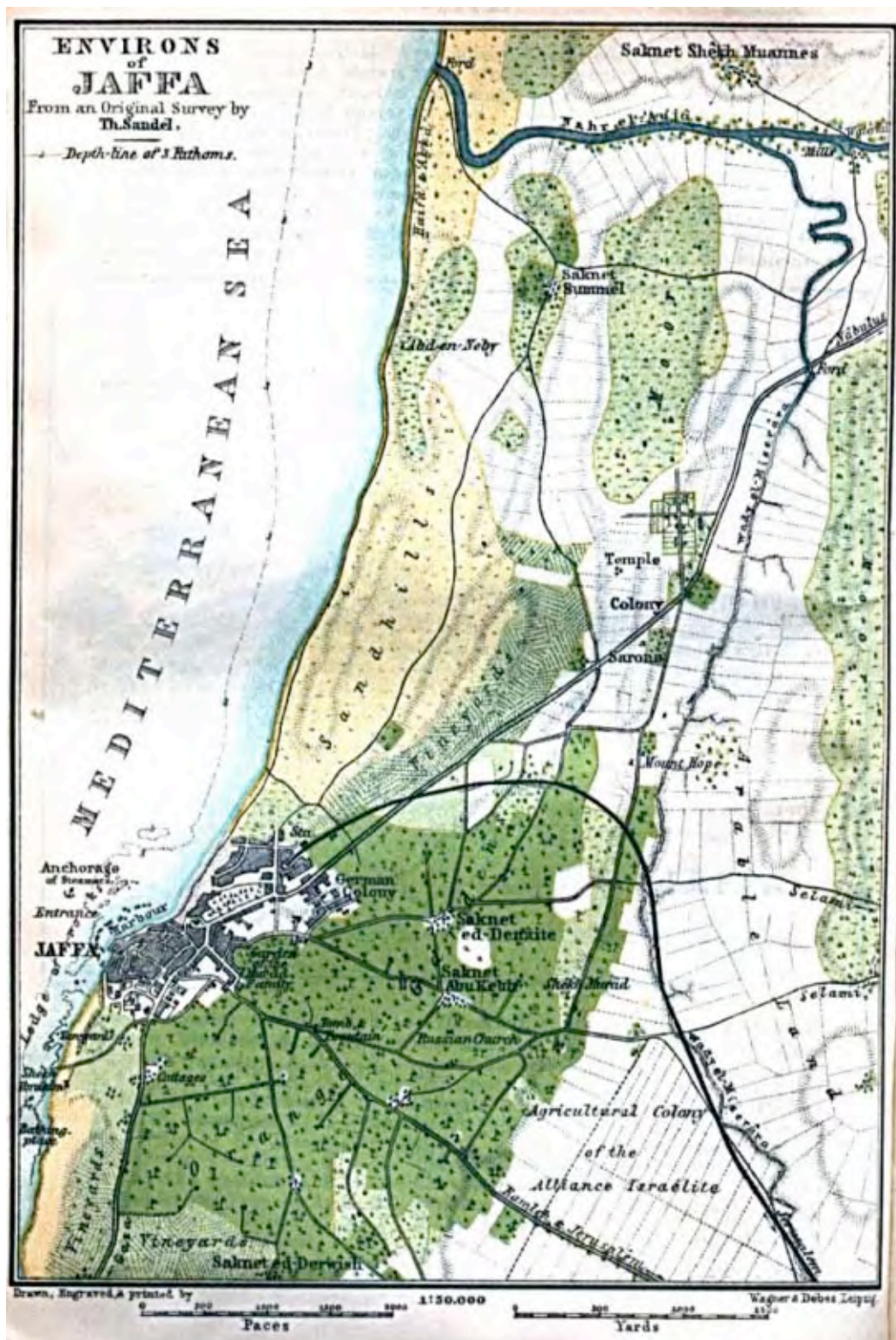


Fig. 5.303. Map of Jaffa and environs from an original survey by Thomas Samuel, 1912. Wagner & Debes, Leipzig.

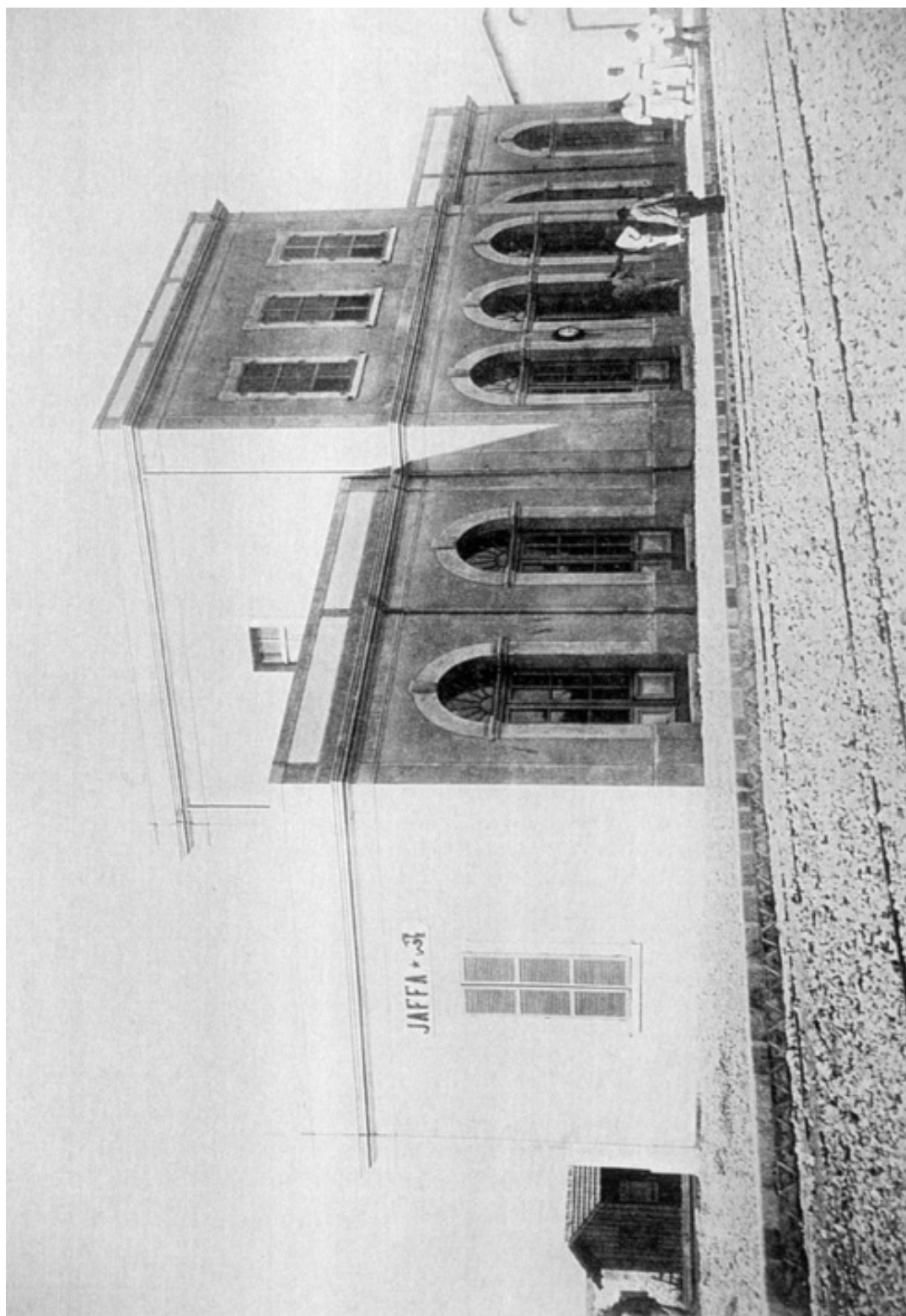


Fig. 5.304. Unknown, likely Garabed Krikorian, view of Jaffa station, c. 1893. Edelstein Center, Hebrew University.

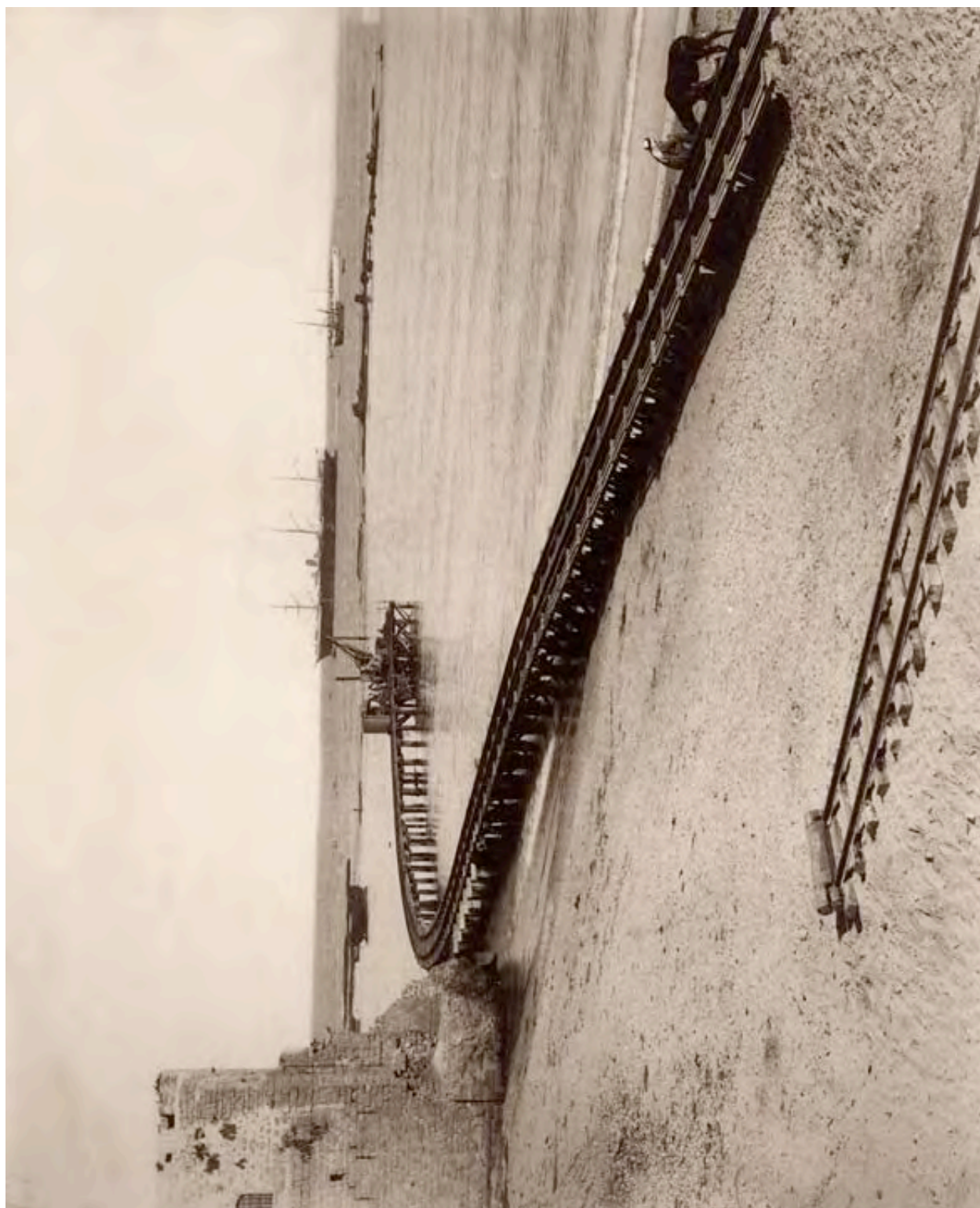


Fig. 5.305. Garabed Krikorian, view of Jaffa coastline and provisional rail construction, c. 1891. PEF P.2584.



Fig. 5.306. View of the Wieland family home and factory at the Jaffa (Tel Aviv) station. Photograph of the author.



Fig. 5.307. Detail of the prefabricated concrete elements in the Wieland family home and factory at the Jaffa (Tel Aviv) station. Photograph of the author.



Fig. 5.308. View of a house on the German Colony at Sarona using Wieland prefabricated elements. Photograph of the author.



Fig. 5.309. View of the shutter holders on the Wieland family home and factory at the Jaffa (Tel Aviv) station. Photograph of the author.



Fig. 5.310. View of al 'Ula station from adjacent garrison. Photograph: Matthew Sutherland.

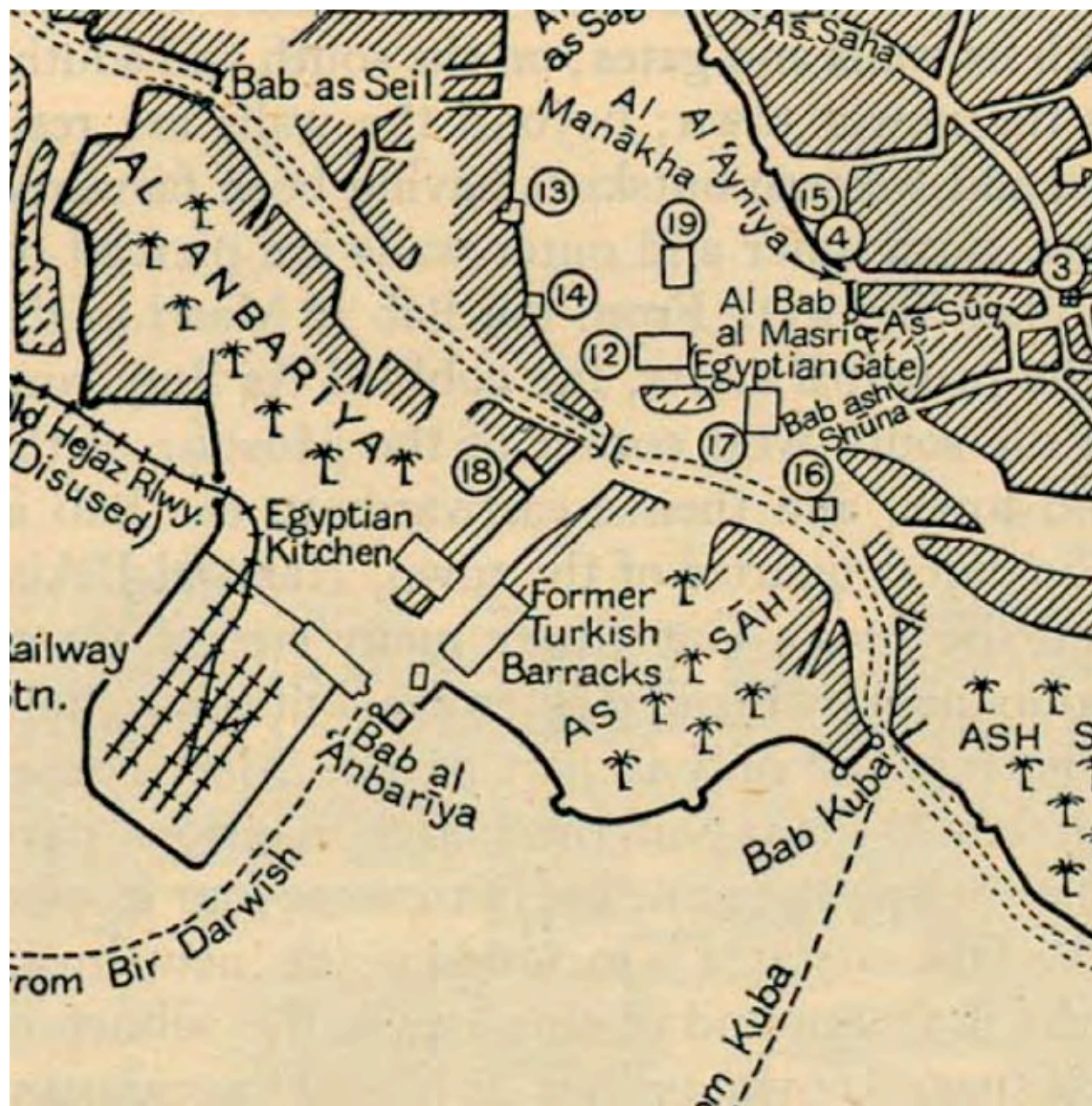


Fig. 5.311. Map of Medina, detail of railway area, 1946. University of Texas Libraries.

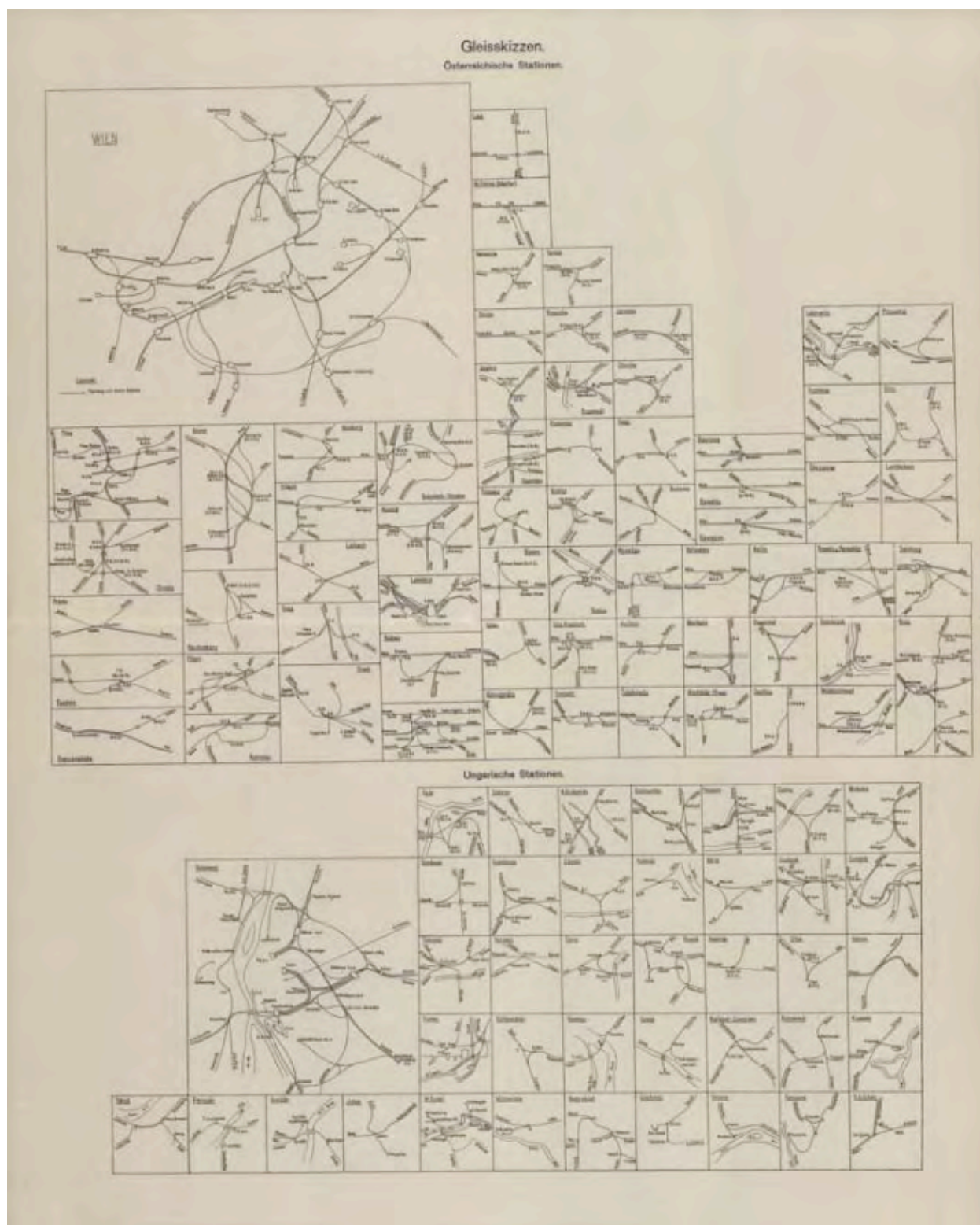


Fig. 5.312. Map depicting the variety of track configurations in major Austrian and Hungarian cities, c. 1915. OSa Kt. 909.

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Ahmet Ersungur: Figs. 5.108-5.109.

Almiskeenah: Figs. 5.275-5.276.

Ana al Ain: Figs. 5.240, 5.242-5.243.

Antikensammlung, Staatliche Museen zu Berlin: Fig. 4.4.

APAAME: Fig. 5.107.

Atatürk Kitaplığı: Figs. 5.1, 5.252.

Atatürk Konutlu Müzesi: Fig. 1.5.

Australian War Memorial: Fig. 5.230.

Auswärtiges Amt: Fig., 5.114.

Aybala-Nejat Yentürk Collection: Fig. 2.84.

Başbakanlık Osmanlı Arşivi: Figs. 1.22, 5.274.

Bayerisches Kriegsarchiv: Figs. 2.137-2.141.

Biblioteca Alexandrina: Figs. 2.5-2.7.

Bibliothèque Nationale de France: Fig. 5.290.

Blouin: Fig. 4.2.

British Museum: Fig. 5.302.

Brown University Libraries: Fig. 5.198.

Christies: Fig. 5.19.

Demiryolcuyuz: Fig. 5.166.

Deutsche Bank, Historisches Institut: Figs. 2.80-2.83, 2.85-2.109, 3.55-3.56, 4.6, 4.21, 4.32.

Deutsches Archäologisches Institut, Istanbul: Figs. 4.9, 5.8, 5.250, 5.253, 5.263-5.267, 5.296-5.297.

Deutsches Museum: Figs. 3.27-3.46.

Dolmabahçe Palace Collection: Fig. 1.12.

Durham University: Figs. 5.98, 5.272.

Gunter Hartnagel: Fig. 5.10, 5.105, Figs. 5.227-5.229.

Hamad Raza: Fig. 5.99.

Harvard University Libraries: Figs. 1.24, 2.8-2.10, 5.181, 5.284, 5.295.

Hebrew University: 5.304.

Imperial War Museum: Fig. 1.36, 5.103.

Institut für Stadtgeschichte (Frankfurt): Figs. 1.11, 2.111-2.136, 5.117, 5.119-5.135, 5.141-5.147, 5.150, 5.269, 5.282-5.283.

Invaluable Auctions: Fig. 2.4.

IRCICA: Figs. 1.13, 5.235-5.236.

James Nicholson: Fig. 5.100, 5.111-5.112.

Library of Congress: Figs. 1.6, 1.14, 2.73-2.79, 3.1, 5.5, 5.14, 5.197, 5.219, 5.249.

Matthew Sutherland: Figs. 5.102, 5.310.

Mehmet Akif: Fig. 5.110.

Mehmet Yavuz: Figs. 5.64, 5.72, 5.151, 5.182, 5.185, 5.187, 5.190, 5.192.

Museum für Islamisches Kunst: Fig. 4.40.

Nabatea.net: Fig. 5.101.

Newcastle University: 5.106.

Niedersächsisches Landesarchiv: Figs. 1.7, 3.44, 4.10-4.17, 4.19-4.20, 5.3, 5.21-5.22, 5.31-5.37, 5.58-5.59, 5.68, 5.70-5.71, 5.96, 5.299.

O. Kürklü: Figs. 5.251, 5.254.

Österreichisches Staatsarchiv: Fig. 1.34, 5.277, 5.312.

Palestine Exploration Fund: Fig. 1.9, 4.39, 5.305.

Regency Superior Auctions: Fig. 5.113.

Robert Prummel: Fig. 5.239.

Roger Bragger: Fig. 5.104.

Hausarchiv des Bankhauses Sal. Oppenheim jr. & Cie., Köln, Max Freiherr von

Oppenheim-Stiftung: Figs. 4.33-4.38, 5.184.

SALT Research: Figs. 1.16-1.17, 1.19-1.21, 5.50-5.51, 5.97, 5.217, 5.221.

Sammlung Irmegard Brand: Fig. 5.223.

Smithsonian Institution, Freer and Sackler Galleries: Figs. 4.43, 4.47-4.48.

Staatliche Museen, Preußischer Kulturbesitz: Figs. 4.41-4.42, 4.46.

TBBM Milli Saraylar: Fig. 5.233.

Technische Universität Berlin: Figs. 5.199-5.207.

Topkapı Palace Museum Library: Fig. 1.1.

Turgay Bülbül: Fig. 5.231.

Türkiye Cumhuriyeti Devlet Demiryolları (TCDD): Figs. 5.38, 5.52, 5.53-5.56, 5.60, 5.63, 5.66, 5.69, 5.78, 5.137-5.139, 5.160, 5.170, 5.172, 5.179, 5.186, 5.278.

Ullstein Bilderdienst: Frontispiece II, Fig. 1.32.

University of Chicago Libraries: Fig. 4.24.

University of Texas Libraries: Fig. 5.311.

Victoria and Albert Museum: Fig. 1.4.

Yapı Kredi Koleksiyonu: Fig. 1.18.